

OLD!
PLAYER 1
THE ESSENTIAL GUIDE
TO CLASSIC GAMES
ISSUE 148
retro GAMER
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PLAYING WITH POWER!
DEVELOPERS EXPLAIN HOW THE 16-BIT CONSOLE DOMINATED THE NINETIES
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THE LORDS OF MIDNIGHT
THE EPIC HISTORY OF AN 8-BIT MASTERPIECE
ALL-TIME GREATEST BBC GAMES
FROM CHUCKIE EGG TO ELITE, READERS REVEAL THEIR FAVOURITE GAMES FOR THE 8-BIT MICRO
ALSO INSIDE
KARNOV
ARTWORX
KIKSTART 2
GHOST BLADE
GUNBLADE NY
DIGGER T. ROCK
GUNSTAR HEROES
FAT WORM BLOWS A SPARKY
FEATURED IN THIS CLUCKING ISSUE:
THE DIZZY GAME YOU'VE NEVER PLAYED
THE OLIVER TWINS EXPLAIN HOW THEY UNCOVERED THEIR LOST NES CLASSIC, DIZZY IN WONDERLAND
BEHIND THE SCENES OF COMMAND & CONQUER
LOUIS CASTLE REVEALS HOW WESTWOOD STUDIOS' STUNNING RTS HELPED REDEFINE THE GENRE
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ISSUE 148

THE RETROBATES

WHAT'S YOUR FAVOURITE BBC GAME?



DARRAN JONES

Being a huge fan of *Defender*, I'll have to go with Acornsoft's rather impressive clone. It still presents a stiff challenge today.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine.
Currently playing:
Call Of Duty: Finest Hour
Favourite game of all time:
Strider



NICK THORPE

I've got a soft spot for *Boffin* – it's a challenge, but well worth it just to see that amazingly animated spider enemy.
Expertise:
Owning six Master Systems (I sold one)
Currently playing:
Tony Hawk's Pro Skater 2
Favourite game of all time:
Sonic The Hedgehog



PAUL DRURY

My only access to gaming on the BBC was during wet breaks at school when we could use the machines for good stuff. *Planetoid* and *Chuckie Egg* had me praying for rain...
Expertise:
Digitiser
Currently playing:
Tearaway Unfolded
Favourite game of all time:
Sheep In Space





GRAEME MASON

Chuckie Egg. While Nigel Alderton's Speccy Classic is the original, the BBC version refined the physics and was even more playable.
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
A depressingly poor array of *South Park* games.
Favourite game of all time:
Resident Evil 4



DAVID CROOKES

Chuckie Egg but only because it was the only game we were allowed to play at school.
Expertise:
Amstrad, Lynx, adventures, Dizzy, and PlayStation (but is it retro? Debate!)
Currently playing:
Broken Sword 5: The Serpent's Curse
Favourite game of all time:
Broken Sword



JASON KELK

FireTrack has always been my BBC game of choice, it starts simple but gets chaotic in the later stages.
Expertise:
Being a homebrew hero
Currently playing:
Space Harrier
Favourite game of all time:
Io



MARTYN CARROLL

The original *Repton*. A classic arcade game with some really smart puzzles. It's no surprise that it's still remembered fondly after 30 years.
Expertise:
Sinclair stuff
Currently playing:
Super Mario Galaxy
Favourite game of all time:
Jet Set Willy



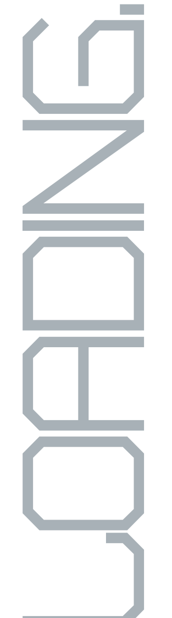
PAUL DAVIES

It's *Labyrinth*. Mode 6... In colour? How is that even possible! (I think it was Mode 6. We just assumed that it was.) Anyway, silly level of detail. Massive, felt like endless, quest to battle fiends and collect random pieces of fruit.
Expertise:
Repeatedly banging my head against a brick wall
Currently playing:
Destiny: The Taken King
Favourite game of all time:
Ghouls 'N Ghosts



JON WELLS

The *Pac-Man* clone that is *Snapper*! Just as addictive as the original and we were even treated to some new sprites (for legal reasons, obviously).
Expertise:
Tackling dirty nappies and retro spreads
Currently playing:
Destiny: The Taken King
Favourite game of all time:
Super Mario World



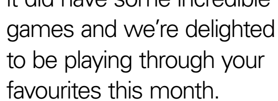
Even though I never owned a BBC Micro in my youth I was familiar with the machine due to it being the main computer in our school. While we used it for programming, Mr Holland would also allow us to play games on it after school and lunch times, so I soon realised that there was quite a lot to the BBC.

While I never owned one of my own when they first came out (it was far too expensive) I did know a couple of friends who owned them and I'd soon find reasons to invite myself over to their houses. Saturday mornings and Sunday afternoons would include watching *Elite*, playing *Exile*, mastering *Thrust* and navigating the relatively complex controls of *Revs*.

It was the arcade conversions that really impressed me though, and the BBC was rife with them. *Snapper*, *Killer Gorilla*, *Mr EE!* the list went on and never seemed to end. I have tremendous memories of playing on the BBC Micro growing up and was delighted to receive a machine from my wife's father when he finally upgraded to a PC.

It might not be the coolest computer, but it did have some incredible games and we're delighted to be playing through your favourites this month.

Enjoy the issue!





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Don't forget to follow us online for all the latest retro updates

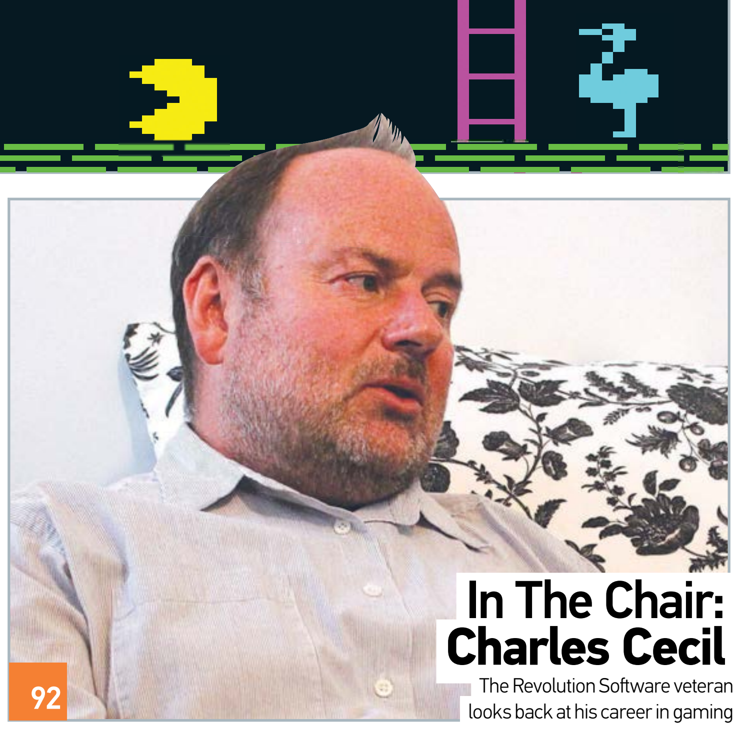
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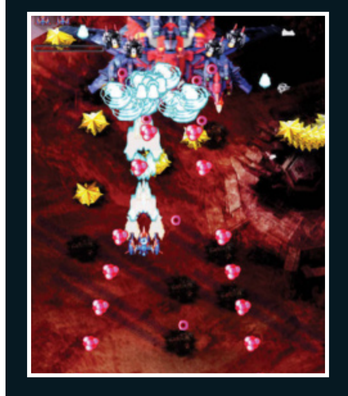
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"Many of the game's big moments came during the boss battles"





REVIEWS



ESSENTIALS

retroradar

MINUTES AND WE'LL GIVE YOU THE RETRO WORLD



CRACKING NEWS!

How the Oliver twins rediscovered a classic Dizzy game in their loft

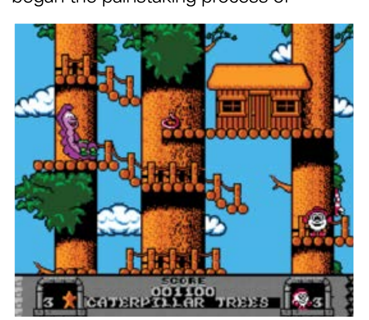
On 25 October, the Oliver twins announced the release of a previously unavailable *Dizzy* game. *Wonderland Dizzy* had been originally planned for the NES as part of *The Excellent Dizzy Collection*, but it was never actually released. That's changed, however, and it's finally possible to play this missing part of the *Dizzy* puzzle.

The story begins earlier this year when the twins ran a presentation for Play Expo Blackpool. Philip produced a map of a *Dizzy* game that a clearly bemused Andrew had no recollection of. "I knew it was a *Wonderland Dizzy* map, but I wasn't sure if it was published," explains Philip. "It was only afterwards we were saying… 'we could release this over the internet, if we can find it.'"

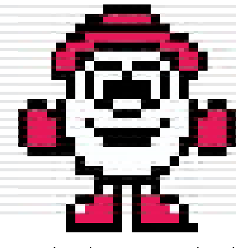
Philip began searching through his loft and after a while, found what he was looking for, the original source disks. We were keen to know if they were in good condition after being stored in a loft for over 20 years. "Actually they read fine," admits Philip. "There was one small missing file… but Lukasz [Kur] reconstructed it! It was bizarre how tiny each file was, about 100 files with a lot under 1k each! The biggest was about 60k. The final ROM image under 256KB. To put that into prospective, one average hi-res photo is equal to 2,000KB (eight times more), an average MP3 song is 6,000KB (24 times more)".

With the game discovered the twins had to find a way to get it to a larger audience. "Once we had the source disk, we had to find someone who could load the data and then compile it into a final ROM image," continues Philip. "I wrote to Jason at the History of Computing Museum in Cambridge and Andrew Joseph who runs the Dizzy fan website Yolkfolk.com. Andrew came back first saying that he thought his friend Lukasz Kur could do it, so I sent them the source code. Lukasz was able to compile the code, but we then discovered a few issues with the game. It wasn't quite complete. Lukasz was happy to fix the final bugs and even added a Fun Mode where players get infinite lives. He's left the classic mode too… for hardcore *Dizzy* players. Because Lukasz is Polish, he offered to add a language option and integrate Polish. We said if that was possible could we also add French, German, Spanish and Portuguese. He said he would, if they'd fit and we provided the text. Andrew Joseph meanwhile found a way to run an NES emulator through a browser – within a webpage."

Slowly but surely the small team began the painstaking process of



» [NES] Graphically, *Wonderland Dizzy* is highly impressive, with bright Amiga-styled aesthetics.

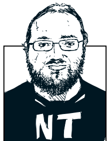


WHAT THE TEAM THINKS



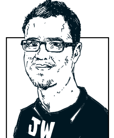
DARRAN JONES

■ I'm delighted that *Wonderland Dizzy* exists. I'm a big fan of the 8-bit hero and this delightful little adventure has everything that I want to see from a classic *Dizzy* game. Yes it would be nice to see a brand new release on Xbox Live, but until that happens this is a perfect substitute.



NICK THORPE

■ I love it when previously undiscovered games from the past are found, especially when they're as good as this – *Wonderland Dizzy* is a very polished NES game. It reminds me a lot of *Fantastic Dizzy*, but that's no bad thing because I loved that game on my Master System.



JONATHAN WELLS

■ Growing up *Dizzy* must have been one of the first games I ever played. It will always be one of those franchises that sticks with me. I thought the original was slightly clunky in it's mechanics but this sequel show that this isn't the case anymore. I'm looking forward to it!



DAVID CROOKES

■ It was a surprise that the game had gathered dust in Philip Oliver's loft for so long given that *Wonderland Dizzy* has been referenced on Wikipedia and even on the Olivers' own website for years. Yet despite being overlooked, this discovery was entirely welcome. In fact its eggshellent.

converting the game and making all the relevant changes and tweaks to ensure that it was in a suitable enough condition for fans of the franchise to enjoy. It also gave the brothers a chance to revisit a game that they'd long forgotten about and they were happy with what they discovered. "It was great to see it running," admits Philip. It [has a] crisp (low res) look, really slick movement and [it was] a big surprise to discover you could play as Daisy too! We also then discovered how hard it was, you're given only three lives! This is why we asked Lukasz to add the Fun Mode. Even with this, though, it's tough, but we hope most players will at least be able to finish the game this way."

While the brothers are pleased at how well the game has stood the test of time, the rediscovery of *Wonderland Dizzy* hasn't really jogged many memories from Philip about working on the original game. "I remember the office, the desks, roughly who was sat where," admits Philip, "but I can't remember actually working on the game." Philip's memory might by a little foggy, but Andrew's is much clearer and he's able to paint a more vivid picture.

I remember coding the game," he begins, "looking at the Amiga version of *Magicland Dizzy* as a basis for the game, but then trying to get this colourful 16-bit game working on the rather limited 8-bit NES console. The artist did a clever job of getting a four-colour character set to pretty much replicate the look the Amiga game and I remember the struggle with very limited sprites, particularly only having eight sprites on a line. I was never happy with the occasional flicker, but there was no solution to avoid this."

Despite the limitations Andrew faced, the end result is a surprisingly impressive looking game. Philip was also able to explain to us why certain elements look like earlier *Dizzy* games. "We discovered the structure of the world map is based largely on *Magicland Dizzy* written by Big Red Software (Paul Ranson, Fred Williams and Pete Ranson), but was redrawn from scratch by Khalid Karmoun to fit the character mapped screen of the NES," he explains. "There are a few sections added and the puzzles are new and based on *Alice In Wonderland*."

> **"There are a few sections added and the puzzles are new and based on Alice In Wonderland"**
> Philip Oliver



» [NES] Playing as Daisy adds nothing to the game, but it's a nice touch all the same



» [NES] There are a number of characters you can interact with who require specific help.

While it's fantastic news that a new *Dizzy* game has been unearthed, it does make us ponder how is it possible to forget about making an entire game in the first place. "We're old," laughs Philip, "what can we say! We have been making games over 30 years. We've [written] about 50 games between 1984 to1993. We never had time to play them that much, the minute they were mastered we simply moved on.

"Since 1992 we started employing people and making many more games – probably well over 100 games and employing over 500 people. We simply don't remember everything we did, but we do store it!

"We found some other interesting things too, but they can be included in Chris Wilkins' book."

So could *Wonderland Dizzy*'s release lead to the possibility completely new *Dizzy* game in the future? Never say never, but there are no plans," Philip tell us. "We are now 100 per cent focused on making *SkySaga* a massive global success and it's far more impressive than Dizzy could ever be.

We're just very happy to be able to share this long lost game, so easily, and freely. And we must also say a big thank you to Codemasters, particularly Frank Sagnier and Nav Sunner." *

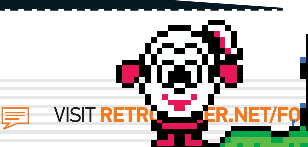
***Wonderland Dizzy* is available now from WonderlandDizzy.com via Yolkfolk.com.**

THE FURTHER ADVENTURES OF THE OLIVER TWINS



The brothers have been extremely busy since Blitz Games Studios closed down in September 2013. They bounced back with Radiant Worlds, a new company based in Leamington Spa and are already having success with their new game, *SkySaga: Infinite Isles*, which is currently in alpha testing. While it looks like *Minecraft* from an aesthetic viewpoint, and there's an emphasis on crafting items, it plays very differently, comprising of mini-quests for players to band together and complete. You can apply for a *SkySaga* account by visiting eu.skysaga.com.

The Oliver twins will also be busy contributing to a book about their career called *The History Of The Oliver Twins*, which launched on Kickstarter the same day that *Wonderland Dizzy* was announced. Chris Wilkins is overseeing the project and we expect it to be every bit as good as his Ocean and US Gold tomes.



» Previously, the Atari Jaguar shell was used to make a dental camera for Imagin HotRod.

DOOMED? MIKE KENNEDY ON HOW HE PLANS TO TURN AROUND THE RETRO VGS



After several months of press, the Retro VGS was announced on Indiegogo, only for it to fail spectacularly. After launching on 18 September, the project was quickly cancelled with the team announcing the project was "dead in the water" on its Facebook page. We spoke to Retro's Mike Kennedy to find out what went wrong and how he hopes to turn interest in the project around.

Why do you think interest in your console was so low?
The interest wasn't low, at least outside the campaign. Thousands of gamers were (and still are) genuinely interested in the Retro VGS and the prospects for a new cartridge-based console. We just made a few mistakes in the final weeks prior to igniting the campaign – mainly launching without a prototype and using Indiegogo instead of Kickstarter. We have just made some changes to our hardware team and have brought back on-board a couple [of] hardware gurus that we were working with last year in the early stages of this project. They have a fresh eye and are helping us engineer the cost down to a more manageable selling price.

» While we love the concept of the Retro VGS, we're unsure a market exists for it.

Were you not concerned that a $2 million target was too high?
It was a high goal and we were concerned about it. People need to remember in addition to [the] cost of goods needed to raise operating capital to run and found this business so we can continue to support the product for years to come. We weren't just crowdfunding a product but also a company to support the product.

Why create a cartridge-based system when featured games are cheaper on other platforms?
We believe there is a market for tangible cartridges to play new games. Even if games are available digitally, there are people that want to own these games and have the right to play these games on original hardware for the rest of their life. Cartridges have value and can be collected and traded forever. They also come with some advantages in that there are no load times and games on them will have gone through extensive QA to assure no bugs. In the unlikely event a game-hampering bug escapes we will have a program to replace those cartridges at no cost to gamers.

Was it a mistake to not have a working prototype ready?
YES! Even though we had a credible team and believed we could deliver the product as we designed, it was a mistake to not have a working prototype. We will have a prototype in the next few weeks, which should address this mistake.

How will you ensure the success of the Retro VGS on Kickstarter?
We will be addressing our three main complaints: price, prototype and Indiegogo. Our next attempt will be a lower cost. We will have a playable prototype and a lower minimum goal. Judging by our Facebook page we will still have support.

What exclusive games do you have for the system?
Tiny Knight will be an exclusive pack-in. Getting exclusives is hard as we have no installed user base and we can't guarantee sales numbers. We are discussing with indies as well as established developers such as DotEmu and Wayforward. We have NG:DEV.TEAM on board and that is exciting to think we can lower the prices of Neo-Geo ports. We also have contacts within Sega, Konami and Capcom and believe if we can show there is a market here, this will be a great platform to reintroduce sequels to popular 16 Bit and arcade classics.

WHAT IS THE RETRO VGS

The Retro VGS is a new console that will deliver an offline, cartridge-based experience like the 16-bit systems of old. If it looks familiar, it's because it uses the cartridge shell of the Atari Jaguar. Steve Woita, an esteemed games programmer from the Eighties and Nineties is one of the machine's co-creators and developers and the system will hopefully include an FPGA with ARM architecture. It's original planned price on IndieGoGo was $350, putting it in-line with today's current generation systems.



» One of the key selling points of the Retro VGS was the complete lack of internet connectivity.



Here's my bio… Paul Davies

In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

1P

I've realised that even when I'm gaming with friends online, I'm still enjoying the life of a loner. And I do mean, really enjoying it. Not always one for sharing a sofa, you know? It can kind of spoil the moment.

Games are my retreat. I don't mind admitting this to you, as hopefully it's a common thing. I do enjoy the trash talk with games of *FIFA*, and had some huge laughs playing the likes of *Mario Kart*, but usually it's me, the TV and whatever I've got next on the pile to play. I should have a sign on my door that says, 'Gaming. Go Away (Please).' Apologies for more potentially oddball comments to follow…

See, it takes a while for me to actually 'get' anything. Like, I didn't 'get' *Elite* to begin with, though my friend was going mad about it. I think I only just got it when he'd moved on to the disc-based edition, while I was still floundering around trying to dock in my first space station with a cargo full of furs. It takes me ages to grasp a concept before I feel like I own it.

I think it's because I'm always overly conscious of what the next guy is thinking. Like, I can happily spend hours attempting one skill manoeuvre in a videogame. This is on my own. But with somebody else overseeing my progress, they're not seeing the beauty of it, which makes me feel bad about it. Okay, in my line of work I have grown used to having people peer over my shoulder a bit. But this is different in a work environment because everyone accepts the element of distraction involved. You're not really there to enjoy, but to examine and make notes. What I'm talking about is getting deeply involved.

Even with something like *Call Of Duty* where there's other humans in the lobby with you, this is the on-screen experience with guys talking through the microphone. It's not an actual room full of people with their arms folded, watching your eyebrow twitching, gob drooling and maybe some involuntary nose picking, who knows… it's involuntary.

I came to realise all this while watching the first 20 minutes of *Guardians Of The Galaxy* with my wife. I've watched this same 20 minutes alone, before stopping because I thought "Holy shit, this is just the best thing I've ever seen." And then here I am with my wife, who kind of likes *Iron Man* and *The Fifth Element*, and she's not finding the alien-lizard-microphone thing funny at all.

Seems I'm a 'doing-things-with-the-lights-out' person. I love to be the only living thing that I'm aware of who's enjoying the power-pill moment in *Pac-Man*. I like to play games without fear of being judged if I just weed in my pants. Cheers! *





What do you think?

Do you agree with Paul's thoughts? Contact us at:

 RetroGamerUK  @RetroGamer_Mag  retrogamer@imagine-publishing.co.uk  www.retrogamer.net/forum



Dredging Up The Dregs

YouTube star Stuart Ashen has picked up almost a million subscribers reviewing tat

Why did you decide to start reviewing tat on YouTube?
An eBay link for a fake Sony PSP called a POP Station was posted on a forum I used to frequent. I ended up buying it, and ad-libbed a quick video to show it to the other forum members who were interested. Somebody must have sent it to the digital arts site b3ta as it was in their Friday newsletter the following week. I only expected about 20 specific people to watch it, so didn't introduce myself or put my website address on it or anything. The main reason I made a second video was to prove that I'd made the first one!

As well as reviews, you done retro gaming videos like Quickest Game Overs Ever. Are you much of a retro game collector?
It's less a hobby and more an illness. I have all sorts of random bits and bobs, recently I've picked up a lot of the classic 8-bit computers. In the last few months alone I've hit up eBay for an Oric Atmos, Acorn Electron, BBC Master, Atari XEGS and an Amstrad CPC 664. My real love is handhelds, though. I've got hold of many obscure ones for my channel and I keep them all. I picked up a rare Systema 2000 from NERG in Newcastle this year, and it took me months to actually find a game to test it with. It turned out to be broken and I still haven't stopped crying.

I only have two 'serious' collections where I want a complete set of something. I have every game released for the Atari Lynx, and I am about halfway to completing the Sega Saturn's PAL library.



» [ZX Spectrum] Our favourite of Stuart's videos highlighted this incredibly bleak ending from *Grange Hill*.

» [Atari ST] Stuart is hoping to draw attention to forgotten disasters like *Graffiti Man* with his new book.

You're currently writing a book, *Terrible Old Games You've Probably Never Heard Of*. Why have you decided on doing a book for this project?
Back in 2011 I was hired by Guinness to write a piece about dreadful and obscure old games for their 2012 Gaming Records book. Sadly the piece ended up being edited to death, but I thoroughly enjoyed researching and writing it. I started to plan out a way to expand the idea to a full book.



» Stuart does review some nice things, but his bread and butter is cheap and dodgy electronic tat.

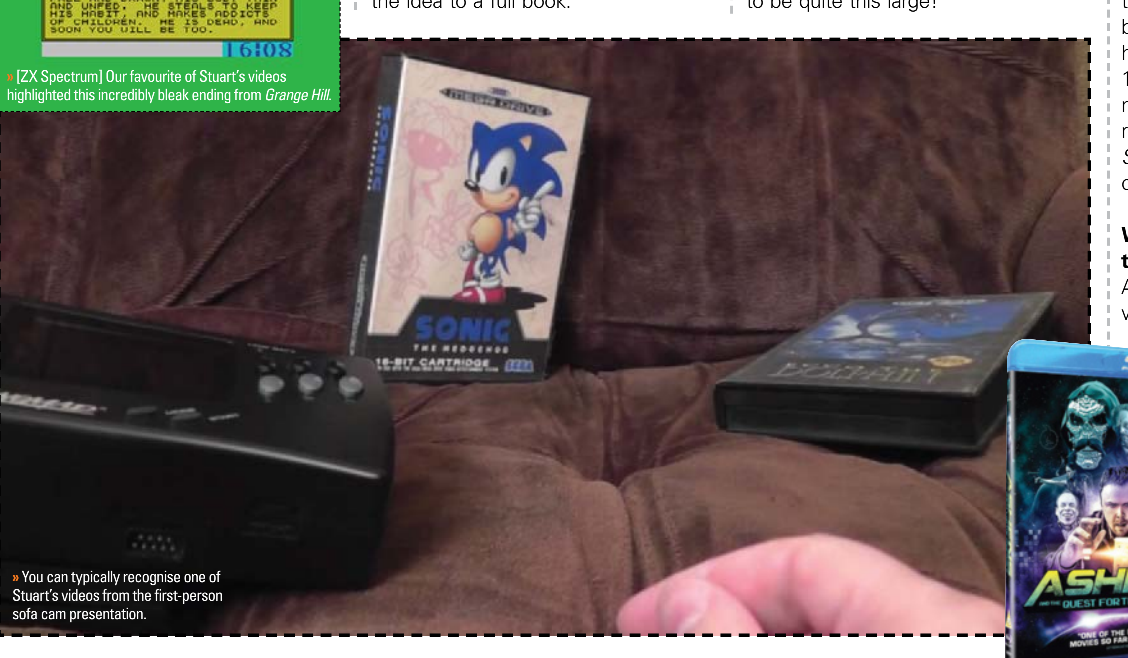
> "Spending money on Shaq Fu seems a good deal compared to Graffiti Man for the ST"
> Stuart Ashen

Fast forward to his year, when many of the big UK YouTubers are having books published. Obviously I don't have the clout of the really major vlog or gaming channels, but it seemed the time was right to strike! I spoke to Unbound, which uses a form of crowdfunding to enable more niche projects. They loved the idea, and we broke records for the fastest funded book in their history. It's now sitting at over 400% funded – I knew there's a market for books about retro games, but I wasn't expecting it to be quite this large!

Why have you decided to focus on home computers for *Terrible Old Games*?
Nearly all articles and videos about bad games only cover titles from the formats popular in America, mostly the Nintendo and Sega consoles. As a result you always see the same titles mentioned, and there are only so many times you can hear about *E.T.* for the Atari 2600 and *Superman* on the N64 before you get bored.

I wanted to dig out the obscure stuff. As the title suggests, games that you've probably never heard of but are absolutely terrible. And the home computer market between 1980-1995 did allow some of the most mind-bleedingly awful stuff to reach market. Spending money on *Shaq Fu* almost seems a good deal compared to *Graffiti Man* for the ST.

What's the most memorably awful thing you've ever reviewed?
A LCD game called *Tilt Games* that was a knock-off Wii remote with a tiny screen set into the top. It played a racing game you were supposed to control by tilting the unit, but didn't work at all. It was a bleeping, rattling stick of nothing designed to rip-off the uninformed. A bit like those Ultraviolet codes you get with Blu-Rays. *



» You can typically recognise one of Stuart's videos from the first-person sofa cam presentation.

NUON

"I purchased the Samsung DVD-N501 with Nuon technology (aka 'Project X') for one reason alone: *Tempest 3000*. I have long been a fan of Jeff Minter and the sequel to his extraordinary Jaguar title *Tempest 2000* is something every retro game aficionado should have access to."

PAID: $83

JEWEL IN THE CROWN

THAT PIECE YOU CAN'T BE WITHOUT

APPLE LISA 2

■ "Launched in 1983, it was the first consumer-orientated computer with a graphical interface, making it a notable milestone in computing history and is also very rare. I have the Lisa 2 which used the more reliable 3.5-inch floppy disc and it works perfectly. I acquired it from a refurbisher in 2005 for $1200."

PAID: $1200

ATARI 520ST

"The ST is a fun machine and I've re-created my original setup over the past few years, but better with an HxC2001 SD card-based floppy emulator system and a RAM expansion from 512K to 4MB."

PAID: $600

AMIGA 1000

"I have a system that I've put together over the past five years, with 2MB of FAST RAM, SCSI via a sidecar expansion and two hard drives. The Amiga was years ahead of its time, and it started with the Amiga 1000."

PAID: $700

VECTREX

"What a unique console! A vector CRT display, solid analogue controllers, and the powerful but seldom-used 6809 CPU. A real treasure."

PAID: $230

Collector's corner

Readers take us through the retro keyhole



BIO

NAME: Blake Patterson

ESTIMATED VALUE: $10,000

FAVOURITE CONSOLE: Amiga 1000

FAVOURITE GAME: *Super Mario 64*

We've had a lot of console love in Collector's Corner over the last few months; now it's the turn of Blake Patterson, co-owner of mobile gaming website TouchArcade and a fanatical classic computer collector. "I'd seen an Atari 2600 and was wowed by the pack-in game *Combat*," says Blake, who sports a fetching *Space Invaders* tattoo on his right arm. "But once I started seeing the home computers, I badly wanted games of that quality, so gaming definitely pushed me towards them." Blake's first choice was an odd one in the TI-99/4A, but a lifelong passion was born.

Blake began collecting in 1999 when nostalgia compelled him to purchase an Apple IIGS system to sit beside his Power Mac. "I enjoyed reliving those memories, so I built a large desk along the walls of a spare room in my house, and things just grew from there." Today, Blake's self-styled Byte Cellar is chock full of classic computer systems, although his collection is far from stagnant. "Here and there I make adjustments, relocating a system to my office in DC and bringing in a new one. It's a collection, not a gallery, and the reason I have these systems is to use them, and enjoy their uniqueness." Blake is proud of the fact he's never acquired a computer only to relegate it to permanent storage. He collects to use, and use regularly.

As to the computers themselves, most of them are machines that Blake either owned in the past, or wanted in his youth. "I always had to sell one machine to get the next," he grimaces, "but now I can reconnect with the systems I loved. And getting to know the computers I couldn't afford at the time such as the Lisa 2 and NeXTstation, provides a different sort of fun." And while his favourite computer is the Amiga 1000, Blake is an unashamed fan of Apple and specifically, the iPhone. "I attended the MacWorld expo in 2007 when Apple announced the iPhone. I was stunned." Suitably impressed by the device, Blake and Arnold Kim set up TouchArcade, which today remains the largest iOS gaming website. *

SAM440EP-FLEX 'AMIGA'

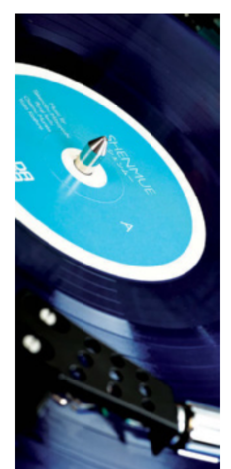
"The 733MHz PowerPC-based Sam440 from Acube Systems is one of three motherboards capable of running AmigaOS. Having it gives me a chance to relive that Amiga magic by using it for practical tasks as well as playing the occasional Amiga game."

PAID: $800



the vault

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH



Shenmue and Streets Of Rage Vinyl Soundtracks

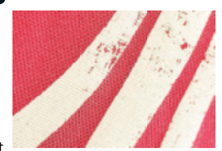
Shenmue and *Streets Of Rage* are the first two videogame vinyl to appear from Data Discs and give a good indication of what we can expect from the company going forward. The presentation for each is superb, with a selection of different coloured records and some lovely art prints (with both *Streets Of Rage* and *Bare Knuckle* art being included for *Streets Of Rage*).

Each record is on 180g and the pressings are exceptionally good. The sound is rich on both records, with *Streets Of Rage* in particular benefiting from some excellent bass. Yuzo Koshiro has been involved with the entire mastering process and the end result is a soundtrack that sounds dynamic and fresh.

Shenmue is also of high quality, but sadly it lacks many of the songs that appeared on the CD soundtrack. A double LP would have made far more sense, but would have most likely pushed up the price. It represents the vast majority of key tracks from the game however, so should still please fans.

Price: £19.99 (each)
From: Data-discs.com

Atari Messenger Bag



Messenger bags are incredibly hipster at the moment and there's nothing more hipster than an Atari bag containing cool Japanese writing. The bag itself is made from 100 per cent polyester and is extremely durable and feels very well-made. It's surprisingly roomy as well and you're able to pack a fair amount into it, from books to iPads and games. The padded strap ensures you can handle a heavy load with ease and it's adjustable, meaning anyone can wear it regardless of height. Atari fanboys will love it, but it's stylish enough to simply appeal to the hipster crowd too.

Price: £24.99
From: Funstock.co.uk

PICK OF THE MONTH

US Gold: The History

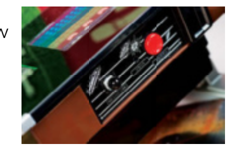
The second history book from Roger Keane and Chris Wilkins is another great read. All the key players are included, meaning there's excellent insight from the likes of Geoff Brown and developers whose games were released by the popular publisher. This is another solid retro read thanks to insightful editorial content and lots of amusing and interesting anecdotes.
Price: £25
From: fusionretrobooks.com

FIFA Football: The Story Behind The Video Game Sensation

While there's an inevitable focus on the newer games, Lee Price's book is still an interesting read for fans of the series. It not only gives a great in-depth look on the creation of the original Mega Drive game, but also looks at each game in the series. The later half of the book obviously deals with how the newer games are made and the success that is *FIFA: Ultimate Team*, but it remains engaging to read with great imagery.
Price: £13.17/ £6.99 (Kindle)
From: Amazon.co.uk

Space Invaders Money pot

Well this is a charming way of saving money. Simply pop a coin in the slot and you can play a miniature game of *Space Invaders*, safe in the knowledge that you're also saving some cash too. In addition to playing a decent rendition of the classic arcade game, it also registers just how much money you've actually saved, which is very handy.
Price: £24.99
From: Funstock.co.uk



BACK TO THE NINETIES

[Nintendo 64] *The Legend Of Zelda: Ocarina Of Time* – one of the greatest videogames to grace any system at any time.

THE LATEST NEWS FROM NOVEMBER 1998

NOVEMBER 1998 – The Dreamcast arrives, Lara's back, Thief: Dark Project steals the show, Half-Life steps out of the dark, Link comes of age while Konami goes old school in the arcades. Richard Burton gets his Pooyan out…



After months of expectation the wait was finally over… if you lived in Japan. Sega released its Dreamcast console priced at ¥29,000 (approximately £143) along with four launch titles; *Godzilla Generations*, *Pen Pen TriIcelon*, *July* and *Virtua Fighter 3*, the only title of the four with any semblance of gameplay.

Meanwhile Nintendo released the Game Boy Color in Europe and America after its recent debut in Japan. The launch games released for each territory were surprisingly different with the US getting *Tetris DX* and *Pocket Bomberman* while Europe bagged the insipid and uninspiring duo of *Frogger* and *Turok 2: Seeds Of Evil*.

Lara Croft made her return with *Tomb Raider III: Adventures Of Lara Croft* on the PlayStation and PC and the winning formula remained intact with adventuring and puzzle-solving at the heart of its gameplay. There were some new terrain additions to Lara's third outing, including icy cold water that hampers her swimming ability and quicksand which tires you out and kills you. The plot this time involved Lara trying to find four artefacts fashioned from the core material of a crashed meteoroid. If they are reunited untold power will be bestowed on the holder. Lara must travel the globe and obtain the items before someone less curvy and more evil finds them.

Lara is decked out with new costumes for each of the five huge stages, she can also sprint, cross chasms with a monkey-swing and crawl around on all fours. The latter is particularly useful as some levels require more stealth and less kick-ass manoeuvres. *Tomb Raider III* was a great addition to the series with burgeoning areas and graphically enhanced features and environments.

New from Looking Glass was *Thief: The Dark Project* on PC. It looked like a first-person shooter but the stealth element was all-consuming with the result being something more akin to a first-person sneaker. You play as Garrett, a beggar in a steampunk-esque city, who is recruited and trained by a secret organisation in the art of breaking, entering and stealing. However, Garrett leaves to become a self-employed master thief and break into the mansions of the well-healed.

What really brings *Thief* to life is the exceptional use of the environment. Light and sound are key elements in the game and you soon learn that the shadows are your friend. You have an on-screen light meter to gauge your visibility, while the various surfaces emit different sounds when you walk on them making route choices even more considered. There are foes to dispatch or avoid in the form of guards and, on later levels, zombies, adding a smidgeon of horror to the proceedings.

Thief pulls all of these different elements together to create a superbly engrossing game. Where else would lurking in the shadows and waiting several minutes for that right moment to move be considered fun gameplay? The graphics in *Thief* are crisp, defined and the immersive qualities are enhanced by the dulcet sound effects and music that tickle the eardrums in all the right places.



[PC] *Half-Life* was a frenetic first-person shooter that never let up due its smooth transitions between chapters.



[PC] Lara Croft is back again with and this time she ditched the usual outfit for a more varied wardrobe.

NEWS NOVEMBER 1998

3 November saw Bob Kane, comic book artist and co-creator of Batman, die at the age of 83. Batman's first appearance was in the DC Comics series *Detective Comics #27* published in May 1939.

15 November saw the TV debut of the comedy drama series *Cold Feet* that followed the lives of three couples. It starred James Nesbitt, Helen Baxendale and John Thomson and lasted for five series spanning 32 episodes.

25 November saw the end of another TV series, the sci-fi show *Babylon 5*. After five series and 100 episodes the story arc was concluded on J. Michael Straczynski's series.

29 November saw Martin Ruane pass away after battling cancer at the age of 52. His name might not be instantly recognisable but his wrestling ring name is – Giant Haystacks.

Weighing in at around 45 stone and a height of six foot 11 inches tall, his imposing figure was a regular on ITV's *World Of Sport* wrestling slot on Saturday afternoons and his ongoing feud with good guy Big Daddy became a fan favourite tussle.

Ruane continued playing the wrestling heel when he joined the American *WCW* franchise as Loch Ness in 1996. He feuded with Hulk Hogan but his US career was cut short after his cancer diagnosis.

Among the best of the music album releases this month were *White Ladder* (David Gray), *Americana* (The Offspring), *Human Being* (Seal), *Supposed Former Infatuation Junkie* (Alanis Morissette) and the *BBC Sessions* (The Specials).

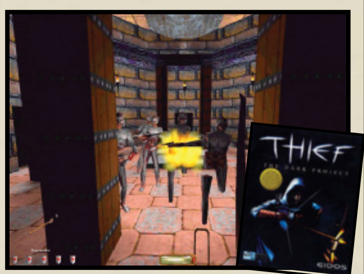
Thief: The Dark Project was a game that got the mechanics, dynamics and aesthetics of stealth gaming bang on. It set the standard for the genre and was a must-have title. Yes, it was that good.

While *Thief* would have you creeping around in the dark like an arthritic sloth, *Half-Life* would see you fizzing about like a rambunctious puppy on a diet of Sherbet Saucers and full-fat cola while shooting and puzzling your way out of an alien infested complex.

Valve Corporation's first software offering was released this month on PC and what a debut it was. *Half-Life* was set in a desert-based research facility in which an alien invasion has taken place thanks to inter-dimensional rips in space.

It's a first-person action adventure shooter with sci-fi and horror overtones. It's also extremely well put together. *Half-Life* was based on the *Quake* engine but the majority of the code was rewritten. Despite an impressive looking product, Valve had problems finding a publisher. Thankfully along came Sierra On-Line which took a punt.

[PC] *Thief: The Dark Project* was a great tactical game, a first-person shooter without that much shooting.



With its lack of cutscenes that many games of this ilk relied on to progress the story, *Half-Life* used scripted sequences meaning there was no interruption to the game's flow. It's continuous with no end of level breaks, instead employing seamless chapter changes that announce themselves on the screen allowing the game to progress without hindrance. *Half-Life* went on to win multiple awards and became an all-time classic PC game.

[Arcade] Konami dust off ten of its arcade classics for a coin-op compilation cabinet. This is *Pooyan* from 1982.



Released this month in Japan and America was *The Legend Of Zelda: Ocarina Of Time* for the N64. You once again control Link as he wanders the land of Hyrule on a quest to stop Ganondorf from finding and using the Triforce, an artefact of omnipotent power. Ganondorf promptly collates the pieces and Link, eventually finding and wielding the Master Sword, must save Hyrule.

The action adventure also featured quests you can embark on that reward you with new abilities or weaponry. There are also many wonderful surprises throughout the game, such as stowing yourself away in the Temple of Time and emerging as a young adult.

Ocarina is beautiful. The large 3D open world works perfectly and plays superbly. It finds the perfect balance of embodying the qualities of older *Zelda* games while enhancing the gameplay and graphics for a new generation.

With the resurgence in retro gaming, Konami reacted by releasing a ten-game compilation coin-op cabinet of its early work. Some of the games included on *Konami Eighties Arcade Gallery* were *Super Cobra*, *Scramble*, *Pooyan*, *Yie Ar Kung-Fu* and *Gyruss*. *

THIS MONTH IN…

PC ZONE

Released this month by Sales Curve was *Carmageddon II: Carpocalypse Now*. The original was censored for its violent vehicular combat particularly against pedestrians. The sequel was much worse with more blood and gore – all in glorious 3D. The reviewer, TV broadcaster Charlie Brooker, of course, loved it to bits.



AMIGA FORMAT

While fellow Amiga magazines and Commodore fell by the wayside, *Amiga Format* plodded on. New games were few and far between, however two new *Quake* add-on games (as was the trend), *Aftershock* and *X-Men: The Ravages Of Apocalypse*, were reviewed. Both were brick hard.



COMPUTER AND VIDEOGAMES

If there wasn't enough football titles already available, *C&VG*'s preview special for eight football games would surely be enough to make you faceplant a goalpost. Which game looked to be the best? The one that looked like *Legend Of Zelda: Ocarina Of Time*…



CHARTS

NOVEMBER 1998

PLAYSTATION

1. WWF: War Zone (Acclaim)
2. Colin McRae Rally (Codemasters)
3. Gran Turismo (Sony)
4. Resident Evil 2 (Virgin Interactive)
5. Fluid (Sony)

NINTENDO 64

1. International Superstar Soccer 98 (Konami)
2. Banjo-Kazooie (Rare/Nintendo)
3. WWF: War Zone (Acclaim)
4. GoldenEye 007 (Rare/Nintendo)
5. FIFA World Cup 98 (Electronic Arts)

PC

1. Cannon Fodder (Sold Out)
2. Commandos (Eidos)
3. Settlers II: Classic (Blue Byte)
4. Titanic: Adventure Out Of Time (Europress)
5. Lula: The Sexy Empire (Take 2)

MUSIC



1. Believe (Cher)
2. Would You? (Touch And Go)
3. If You Buy This Record Your Life Will Be Better (Tamperer Ft. Maya)
4. Heartbeat/Tragedy (Steps)
5. Each Time (East 17)

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retro GAMER.net
READER'S REVIVAL

The Quest For Camelot

"LET'S NOT GO TO CAMELOT – 'TIS A SILLY PLACE"

#94

» TITUS » GAME BOY COLOR » 1998

As a child, I would always ask my parents for a game whenever it came to Christmas or my birthday, mostly because money is precious as a kid and £30 games were forever out of reach. One birthday, however, my parents had the notion of choosing a game for me rather than simply getting what I asked them for and so, on that particular birthday, I unwrapped *The Quest for Camelot*, a relatively unknown *Zelda* clone for the Game Boy Color. Was I disappointed? Perhaps, but I was far from ungrateful so I smiled and said "Thank you" and gave it a whirl anyway, ignoring my longing to return to whichever *Pokémon* game had my attention at the time.

As it turned out, *The Quest For Camelot* was the videogame adaptation of an animated film that I hadn't even heard of, and I still know precious little about to this day. I soldiered on regardless and was pleasantly surprised to find that it was a pretty decent game. Playing like a handheld *Zelda* with none of the backtracking and a far more linear approach, *Camelot* was simple but oddly charming – not the dog I'd immediately assumed it to be.

There were some infuriating sections and times when I was left utterly clueless as to what to do, but I managed to beat the game. Looking back now, *Camelot* is quite clearly a poor man's *Zelda* to the extent that the menus, items and health display were all but identical. Despite the visual similarities however, it wasn't a patch on the Game Boy *Zelda* games yet I still have fond memories of this one to the point where I may actually unearth the cart once again for another playthrough… *

RICHARD MOORE



ALL-TIME GREATEST BBC GAMES

Whilst planned as an educational machine, there were still plenty of great games on the Beeb. Darran Jones revisits some of your favourites

Meteors

■ **PUBLISHER:** Acornsoft
■ **YEAR:** 1982 ■ **GENRE:** Shoot-'em-up

25 It would appear that you all love arcade games with a large number of coin-op clones making your list. First up is this rather excellent rendition of *Asteroids*, which features all the usual mechanics, alongside some very convincing physics. The gameplay builds nicely, with large numbers of asteroids swarming you on the later stages. The hyperspace button feels far more forgiving than the coin-op's, while the minimalist visuals keep the speed nippy.

Codename Droid

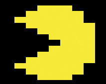
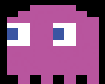
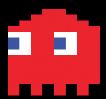
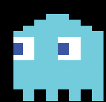
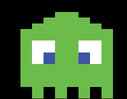
■ **PUBLISHER:** Superior Software
■ **YEAR:** 1987 ■ **GENRE:** Run-and-gun

24 This BBC sequel really pushed the machine to its limits. It's graphically superb with bold bright visuals and smooth scrolling. The game adds greatly to the original run-and-gun, *Stryker's Run*, by adding jet packs and the ability to manipulate items. Although Nick Chamberlain was once again involved with the game, Chris Roberts wasn't. Instead programming was shared with Reflections' Martin Edmondson.

FireTrack

■ **PUBLISHER:** Electric Dreams
■ **YEAR:** 1987 ■ **GENRE:** Shoot-'em-up

23 Nick 'Orlando' Pelling was something of a whizz when it came to the BBC Micro and you've ended up voting for three of his games. First up is Nick's impressive take on the old Tehkan coin-op *Star Force*. It's a faithful conversion and it's also a technical masterpiece, with Nick creating smooth scrolling to showcase the game (as revealed in **RG** 144). The gaudy visuals aren't for everyone, but the fast-paced blasting most certainly is.

Snapper

■ **PUBLISHER:** Acornsoft ■ **YEAR:** 1982 ■ **GENRE:** Maze game

22 There's an interesting story behind *Snapper* that we'll be fully revealing in a future issue with creator, Jonathan Griffiths. In the meantime, lets simply celebrate one of the finest *Pac-Man* clones to be found on any home computer. It really is that special.

One of the main reasons why *Snapper* is so much fun to play still is because it's just so darned nippy and fast-paced. Jonathan's mastery of the BBC Micro saw him coding the game in machine code, rather than BASIC, which ensured that *Snapper* ran at a blisteringly fast pace, which is very reminiscent of the arcade coin-op, in fact. It was one of the very first launch games for Acornsoft when it launched its label and became a great calling card for the company which would go on to dominate both the BBC Micro and your final list.

Initially *Snapper*'s visuals were virtually identical to the original *Pac-Man*, but the graphics had to be revisited to ensure it wasn't in direct violation of Namco's game. As a result the ghosts were changed completely and given appendages, while the titular Snapper gained a jaunty little hat and legs.

The maze layout is highly reminiscent of *Pac-man*'s, although it was altered to fit for a horizontal screen and the AI of the enemies is different – admittedly Jonathan's creations do not match up to the seemingly complex AI of the original *Pac-Man* ghosts. Despite these differences, the core gameplay between the two is incredibly similar, with BBC Micro owners receiving an excellent little maze game that played just as good as it looked. We're somewhat surprised that it's actually so far down your list, but there's no denying that the repetitive gameplay won't be to everyone's taste.



Snapchat

Snapper coder Jonathan Griffiths talks to us about his history with the BBC Micro



What drew you to the BBC?
Well, I was working for Acornsoft, so we had free access to them. But it was a lovely machine, being based on the Atom that I'd enjoyed learning my craft on, but better in all ways – faster processor, better graphics, full-colour, more memory and much more expandable.

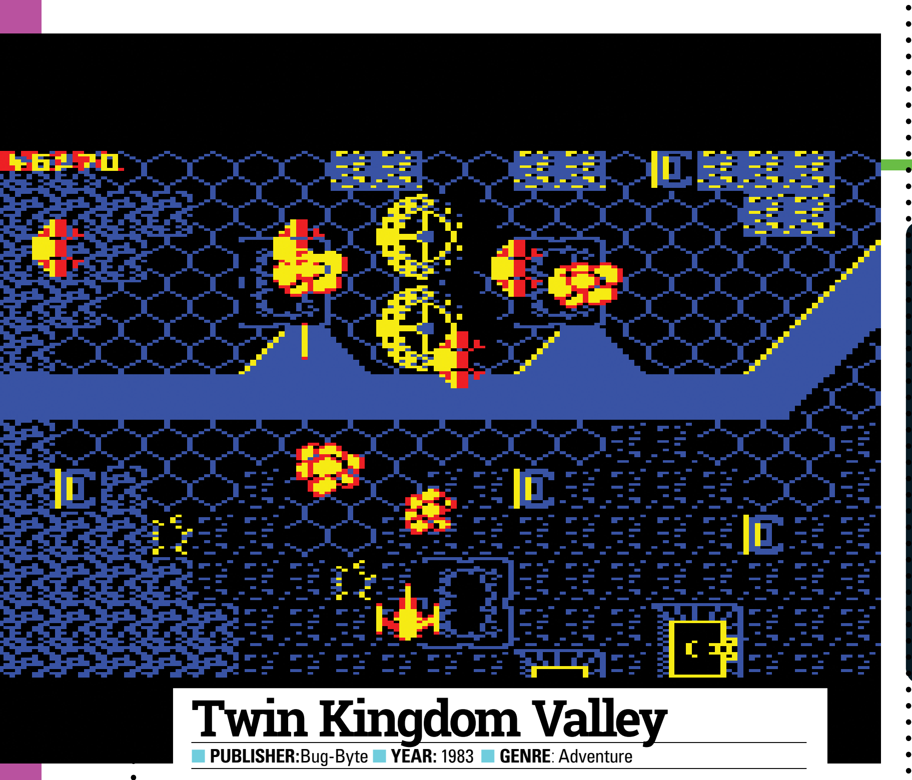
You were working at Acornsoft when *Snapper* was made. What was it like there?
Acornsoft only had about ten staff members - David (AKA 'DJD'), his secretary Mickey Luff (a lovely old woman), along with a bunch of us programmers. When I first joined in September 1981, Acorn were in the same offices as us, but a year or so afterwards they moved out to the old Waterworks site in Cherry Hinton. The atmosphere was very relaxed and informal, which suited me quite well.

Did you pitch *Snapper*, or were you asked to create it?
Three of us – Tim Dobson (*Monsters*), Neil Raine (*Defender*) and me – all decided to write copies of our favourite arcade games. The idea was to get as close as possible to the original, using a BBC model B with Mode 2 graphics (160x256 with eight colours). This used 20K of our 32K RAM, and the OS also used another 3.5K, leaving the game to run in a little over 8K RAM.

What's the most interesting anecdote you can remember about working on *Snapper*?
Being beaten at my own game! Various people, including Jon Thackray at Acorn, would play my (and the other) games assiduously, improving all the time, while I was busy writing *Rocket Raid*. Eventually they would start telling me that they'd reached the end and got to the 'acorn' screen, which I never did. I'd cheated and jumped straight there for the limited testing I did.

How does it feel knowing people still enjoy your game?
It's fun. New people occasionally find out that I wrote some ancient games, and are suitably impressed. One manager brought in his copy of *Creative Assembler* recently for me to sign, after he'd kept it since learning to program on the BBC as a child. Mostly, though, unless you're at least 40, you'd never have heard of my games.

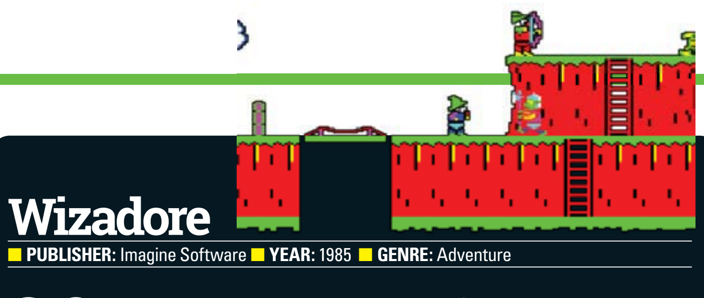
What are you doing now?
Working for British Gas, writing device code for gadgets. I wrote the firmware inside British Gas' energy monitor. We made some 750,000 which were given away to customers. The whole 'Internet Of Things' space is very exciting – it's rather fun to be at the forefront of another wave!



Twin Kingdom Valley

PUBLISHER: Bug-Byte **YEAR:** 1983 **GENRE:** Adventure

21 While there were a fair number of text and graphic adventures on the BBC Micro, only *Twin Kingdom Valley* has made your list. The valley is the home of two duelling kings and your task is to explore it and collect as much treasure as possible with the aim of scoring 1024 points. You're unlikely to do this, as it's a difficult game due to the sheer amount of enemies and tough puzzles. Although the graphics are limited, they manage to conjure up an enchanting fantasy setting. It's also filled with plenty of characters to interact with, creating a 'storybook come to life' vibe. Not bad considering this was Trevor Hall's first stab at the genre. It even tells you the secret of life, which is…well, play the game and find out.



Wizadore

PUBLISHER: Imagine Software **YEAR:** 1985 **GENRE:** Adventure

20 This lavish adventure was created by Chris '*Wing Commander*' Roberts and was his first published game. He originally wanted Ultimate to publish it, but the deal never happened. Although it has the distinctive visual look of an Ultimate game, along with some exceptionally smooth scrolling, the gameplay isn't quite up to the same standard. There's an interesting spell system at its core, but the actual controls are clunky in places, while the difficulty can make it rather frustrating to play.

However, the beauty of the aesthetics along with the sense of discovery in the world keeps you hooked, and that's before you consider that Imagine was offering £100 to those that could finish it.

Monsters

PUBLISHER: Acornsoft **YEAR:** 1982 **GENRE:** Platformer



19 If *Monsters* seems familiar, it's because it's a clone of Universal's rather wonderful *Space Panic*. The levels are filled with ladders and platforms and you must dig holes to trap the many monsters that are pursuing you. Once a monster has been caught, you have a limited amount of time to fill your hole back in, hopefully killing him so you can clear the level. *Monsters* was another slick clone from Acornsoft and captured every aspect of Universal's game, including the tight time limit. The AI and collision detection isn't quite on par with the arcade original, but they're small niggles and don't detract from what is a highly entertaining platformer.

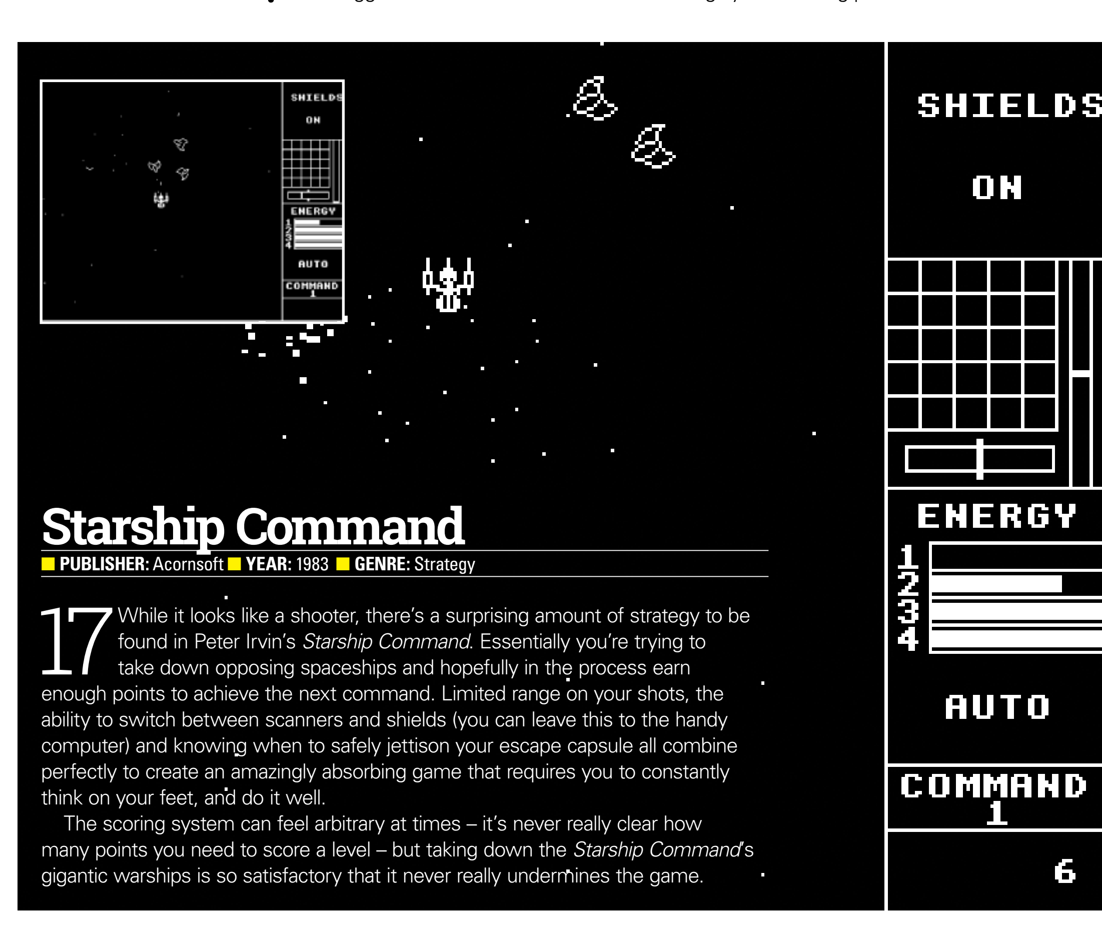


Mr EE!

PUBLISHER: Micro Power
YEAR: 1984 **GENRE:** Maze Game

18 We're astonished that this clone of *Mr Do!* is so far down your list because it's incredible. Coded by Adrian Stephens (who was also the programmer behind *Donkey Kong* clone, *Killer Gorilla*, *Mr EE!* is quite simply fantastic.

It does an great job of capturing the layouts of the original arcade game and matching all the gameplay mechanics. Even the music has been recreated. The brilliance of *Mr EE!* is the sheer amount of options that it gives you while playing. It's a masterful conversion of a masterful arcade game, which never received the love it truly deserved.



Starship Command

PUBLISHER: Acornsoft **YEAR:** 1983 **GENRE:** Strategy

17 While it looks like a shooter, there's a surprising amount of strategy to be found in Peter Irvin's *Starship Command*. Essentially you're trying to take down opposing spaceships and hopefully in the process earn enough points to achieve the next command. Limited range on your shots, the ability to switch between scanners and shields (you can leave this to the handy computer) and knowing when to safely jettison your escape capsule all combine perfectly to create an amazingly absorbing game that requires you to constantly think on your feet, and do it well.

The scoring system can feel arbitrary at times – it's never really clear how many points you need to score a level – but taking down the *Starship Command*'s gigantic warships is so satisfactory that it never really undermines the game.

Sailing The Good Ship Micro

Richard Kay recalls working on projects for Ocean Software

What was the BBC Micro like to code on compared to other 8-bit systems?

The BBC Micro was great to work on at that time, as it was extremely fast for its day. It was almost impossible to run out of processor time and in many circumstances you had to put a delay loop in your code in order to wait for the 'frame flyback' (the time taken to complete a screen update).

It was a very raw machine to work on, unlike the C64 which had hardware sprites – this had its advantages but meant you were limited to what the hardware allowed you to do with those sprites. However, on the BBC you had to write your own sprite routines which meant you had far more flexibility in what you could do, as you were only really limited by your ability and the memory that was available.

The major limitation of the BBC was its lack of memory as the screen display devoured so much of it, especially in full-colour mode, so you had to compress pretty much everything and decompress when you needed the images, map data and code to run other parts of the game.

What was the most impressive BBC Micro game that you played and why?

The most impressive game I have ever played on the BBC Micro was *Elite*, because it had so much crammed in to it and it opened up a new way of thinking when it came to game design and what you could achieve with the medium.

Why do you think the machine had some many excellent arcade ports?

The BBC hardware allowed you to take full control of the screen and you could even change the position of what memory position the display hardware was looking at, so you could achieve some pretty impressive scrolling – it was a tricky task but very achievable.

What BBC Micro game that you've been involved with are you most proud of and why?

My first ever commercial game was *Mr Wimpy* which was awful and had some pretty impressive bugs in it, but it was my first ever commercial product so for that reason I was proud of the achievement. The final BBC game that I coded for Ocean Software was *Hyper Sports*, and it was a port of the arcade game. It had many challenges and would not fit in one load, so all of the levels were loaded separately (credit to Kevin Edwards for his superb tape loader). This game made it to number one in the charts at Christmas 1985 so I'm proud of that fact and that the game was pretty close to the arcade game.

The Sentinel

■ **PUBLISHER:** Firebird ■ **YEAR:** 1986 ■ **GENRE:** Strategy

16 While he's best known for his love of racing games, Geoff Crammond also created this 8-bit masterpiece. Yes it runs incredibly slow compared to its 16-bit cousins, but there's still something terribly thrilling about playing Geoff's game and trying to avoid the all-seeing and titular Sentinel.

The gameplay is incredible, with you controlling your Synthoid and attempting to reach higher ground than the Sentinel that controls each area. During a turn you can absorb spaces, and also build trees and boulders and perform several other useful actions. New Synthoid shells can be placed on boulders and empty areas, allowing you to slowly and gradually make your ascent by transferring your consciousness into the new Synthoid and absorbing the old one.It sounds complicated and it is to a point. But it's also completely captivating, with the slow burn of loading in the visuals actually adding to the deep gameplay.

This game is still good. One I still play, and I still start panicking when the robot can see me! 10,000 procedurally generated 3D landscapes being rendered on a humble 8-bit is still pretty darn impressive!
uglifruit



Arcadians

■ **PUBLISHER:** Acornsoft
■ **YEAR:** 1982 ■ **GENRE:** Shoot-'em-up



15 Nick Pelling's second game on your list is a rather excellent *Galaxians* clone and yet another Acornsoft game to make the cut. The bullet firing feels a little slower compared to the arcade game and your ship is bulkier, but it's an otherwise superb clone.

Castle Quest

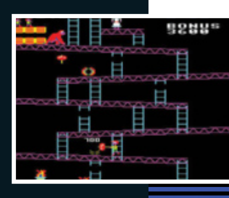
■ **PUBLISHER:** Micro Power
■ **YEAR:** 1983 ■ **GENRE:** Platformer



14 Famed for its smooth 'scrollerama' side-scrolling, *Castle Quest* is a huge platform adventure that requires you to collect a variety of everyday items to overcome the puzzles and hazards found in the huge environment that Tony Sothcott ingeniously created.

Killer Gorilla

■ **PUBLISHER:** Micro Power
■ **YEAR:** 1983 ■ **GENRE:** Platformer



13 It's a pity that Adrian Stephens only made two arcade clones for the BBC, as he proved he was a dab hand at them. As you may have guessed, this is a port of *Donkey Kong*, and it's a great one too, with all the original levels included.

Imogen

■ **PUBLISHER:** Micro Power
■ **YEAR:** 1986 ■ **GENRE:** Adventure



12 There's a lot of brain stroking to be done in Michael St Aubyn's *Imogen*, particularly if you want to reach its end. The puzzles are incredibly devious, while the ability to transform into various animals ensures that the gameplay always remains entertaining.

Frak!

■ **PUBLISHER:** Aardvark
■ **YEAR:** 1984 ■ **GENRE:** Platformer



11 Nick Pelling's third game rests just outside your top ten. It's a worthy position for the lovable caveman who has a penchant for swearing and yo-yos. While the colours remain insanely garish, there's no denying the grerat level design and gameplay.

A Cut Above

Superior Software's co-founder Richard Hanson gives his insight into the important BBC publisher



Why was Superior Software founded?
Home computers have always been of great interest to me, and in their early days I wrote a number of games and utilities. I decided to set up Superior Software with another software developer, John Dyson, as we felt confident about successfully managing a software business; it was a very interesting and exciting opportunity.

Why choose to focus on the BBC?
The BBC Micro was a well-produced British home computer that appealed to many programmers due to its facilities and features. Acorn created some remarkable computers, and the BBC Micro was an utter masterpiece of design.

A lot of famous developers had their break with Superior, how important was it to secure talent?
Several very skilful and well-known developers – including Martin Edmondson, Chris Roberts and Peter Johnson – have written software for Superior, and that has certainly been extremely important for the company's success.

How do you feel that over half of the top ten BBC games are Superior titles?
It's very pleasing and a nice acknowledgement for everyone who has worked on those games.





Why do you feel the BBC remains so loved after all these years?
Some wonderful software, relatively easy computer to program, plenty of handy hardware features – and many people have very fond memories of using the BBC Micro in their earlier years.

Which is your favourite of Superior Software's top six and why?
I enjoy all of the leading BBC Micro games, and my personal favourite is definitely *Repton 3*. I think it's the best puzzle-solving game I have ever experienced. The *Repton* series of games still has a keen following today: Superior now sells PC and iOS versions of the games, and an Android version of *Repton* is almost ready.

Was there any rival game you had a chance to publish and didn't?
Not that I recall. An unusual game called *Jeremy Goes Jumping* was a close decision to publish, but it didn't quite make the grade for publication.

Superior Software is still going today. What's the secret to your success?
I have always done my best to treat everyone – customers and colleagues alike – fairly and with integrity, and I think that's been very important over the years. The customer feedback, particularly regarding the *Repton* games, has been very gratifying – that's the most enjoyable and encouraging aspect of all.

Repton

PUBLISHER: Superior Software
YEAR: 1983 **GENRE:** Maze game

10 It's perhaps fitting that a large number of original games, many of which started off life on the BBC, make up your final top ten. *Repton* is first up and is remains an excellent debut by teenager Tim Tyler.

It might only feature 12 levels, but it will take a hellishly long time to master Tim's game, particularly if you choose to avoid the admittedly handy password system that he included. It may look like *Boulder Dash* (though Tim remarks that he has never played it to this day) but that's where the similarities end. *Repton* is very much its own beast, with a far larger emphasis on exploration compared to *Boulder Dash*. You need to be far more considered of your actions too, as it's all too easy to create situations that will make a stage impossible to finish. You'll stick with *Repton*, though, realising it was your own stupid greed and not Tim Tyler's clever design that stopped you from securing that last diamond.



Revs

■ **PUBLISHER:** Acornsoft ■ **YEAR:** 1984 ■ **GENRE:** Racing

9 He may have found critical acclaim with his *Grand Prix* series, but BBC Micro owners knew Geoff Crammond was a developer to get excited about thanks to the likes of *Aviator*, *The Sentinel* and *Revs*.

Although it looks like a traditional racing game, there are a lot of cool things that separate *Revs* from its peers. It's possible to adjust the wind resistance on your vehicle; the AI of opposing cars is relatively advanced; undulations in the track's surface have been painstakingly added, while the rendition of Silverstone is surprisingly accurate.

The power of later PCs would allow Crammond to truly indulge in his obsession with the genre, but it's amazing to see what he was able to achieve on such a limited platform. If you want a more enhanced *Revs* experience, then we suggest you track down *Revs 4 Tracks*, an expansion that adds Donington Park, Snetterton, Oulton Park and Brands Hatch.

Stryker's Run

■ **PUBLISHER:** Superior Software ■ **YEAR:** 1986 ■ **GENRE:** Run-and-gun

8 Here's another gem from Chris Roberts that you've voted for. Coming in enhanced and non-enhanced versions, it's a rather splendid little run-and-gun with lovely scrolling and some extremely impressive visuals. In fact, the visuals really are something, with plenty of variety to the locations and lots going on. The enhanced version of the BBC Master/B+ look particularly nice, pleasing anyone who would have bought into the more advanced systems.

Fortunately, the gameplay is just as good regardless of which version you may have played, and while it lacks the exploration found in its sequel, *Codename Droid*, there's still plenty to enjoy. Firing lasers and throwing grenades never gets tiring, while watching enemies disintegrate into skeletons is a lovely touch. Exhilarating to play, it's like discovering a arcade game of the era that you never knew existed. While it's most likely inspired by a few classics, it doesn't feel like an all-out clone of anything.

> I think the B version missed out on some extra content that the master had – maybe the music? Great game though, particularly the helicopters.
> **Alexlotl**

Planetoid

■ **PUBLISHER:** Acornsoft ■ **YEAR:** 1982 ■ **GENRE:** Shoot-'em-up

7 One thing we've learned while compiling this list is that we need to do a standalone feature concentrating on the many amazing BBC Micro arcade clones that existed for the machine. This is perhaps the finest of the lot and it's rather fitting that it's charted so high. One look at *Planetoid* should tell you that it's an obvious clone of *Defender*. Less obvious is just how good a clone it is. It's a staggeringly fast game, and it looks absolutely stunning in motion, effortlessly matching the insane speed of Eugene Jarvis' original game. It was even called *Defender* at one point, but the name was changed (although, interestingly, Acornsoft didn't make anywhere near as many adjustments to *Planetoid*'s look as it did with *Snapper*). Clones of *Defender* popped up on numerous 8-bit systems, but none could match the sheer majesty of *Planetoid*. An astonishingly good blaster.



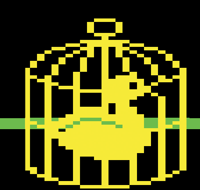
Repton 3

■ **PUBLISHER:** Superior Software
■ **YEAR:** 1985 ■ **GENRE:** Puzzle

6 With Tim Tyler passing up on making a third *Repton* game, the task fell to Matthew Atkinson. Guided by Superior Softare, Matthew's sequel ditched the gigantic cavern of its predecessor for the more familiar level and password layout of the original *Repton* game. It did include a few *Repton* 2 additions mind, adding in the likes of fungus and bombs. It's the excellent level editor that really helps *Repton 3* stand apart from its peers, and it was clearly a hit with gamers as it went on to sell more units that the previous two games combined. Not bad for an ugly lizard man with a fetish for collecting diamonds.

> A good arcade puzzler, with some devilishly fiendish levels. I think it's the only Beeb game I ever saw an original, retail copy of.
> **smac**







Chuckie Egg

■ **PUBLISHER:** A&F Software ■ **YEAR:** 1983 ■ **GENRE:** Platformer

5 While it's not based on any arcade games, *Chuckie Egg* does have a lovely arcade feel to it. This should come as no surprise as Nigel Alderton used to enjoy playing them while he was designing his popular game. The controls of Chuckie Egg are tight and precise, the gameplay is slick and responsive, while the level design challenges but never frustrates. In fact it's so good, it wouldn't look out of place in an arcade next to the like of *Pac-Man* and *Donkey Kong*. While it started off life as a Spectrum game, A&F's Doug Anderson and Mike Fitzgerald soon realised that creator Nigel Alderton had a hit on his hands and they steamed ahead with BBC Micro and Dragon 32 ports. While the first eight stages are challenging enough, things take a sinister turn from Stage 9 onwards. The first eight levels feature a caged duck, who eventually manages to break free, and begins to chase you around the screen as you continue your frantic egg collecting quest. A genuine classic that we're pleased to see place so high.





A Good Egg

Nigel Alderton remembers creating this platforming classic

What games inspired *Chuckie Egg*?
Chuckie Egg was inspired by *Donkey Kong* and a less well-known game called *Space Panic* which I played in the newsagent on the way home from school. It's a little embarrassing how similar *Chuckie Egg* and *Space Panic* look.

How do you feel the BBC version compares to the Spectrum original?
I've not played the BBC version for 30 years but I think the jump was smoother and more accurately modelled a natural fall. Other than that from what I remember they are pretty much identical.

Why do you feel the game is still so popular?
I don't know! Maybe you could ask players. It's pleasing to know that people still recall it with fondness years later.

Why did you never work on the sequel?
I wasn't keen on the game design that A&F came up with for *Chuckie Egg 2*. It seemed to be more of a strategy game than an arcade game and I preferred arcade-style games – I still do. Also, I had to concentrate on my A Levels.

What are the elements that make *Chuckie Egg* so successful?
It's addictive, but I'm not sure what makes it or any game addictive. I do like the way *Chuckie Egg* progresses. There's a balance between the familiar and the unfamiliar – enough repetition to allow a player to learn, but enough surprises to keep things interesting, hopefully.

Why did you let the duck break out of its cage for the second loop?
Each screen layout took up quite a lot of memory so I couldn't have very many of them, but I wanted the game to keep evolving for many more levels. The duck meant I could reuse the same platform layouts to get more levels for not much more memory.

I wanted the duck to be visible in its cage for the first eight levels but be completely passive so the player would just forget about it. Then on level nine they would get a bit of a surprise.

What was the biggest technical challenge you faced while working on *Chuckie Egg*?
Simply getting the man to interact with the platforms and ladders in a way that looked roughly correct was really fiddly. Just to get him walking round so he didn't get trapped, or hang in space when he should fall took many rewrites. Also when he is jumping or falling, getting him to bounce off the platforms correctly and land on platforms rather than falling through them took much head-scratching. From the very start of coding to the end, I was messing with those bits of the code.



"Ceeetadel, Ceeetadel, CEEETADEL." I'll always remember the speech synthesis which greeted you on loading this.
idespair

Citadel

PUBLISHER: Superior Software **YEAR:** 1985 **GENRE:** Platformer

3 While *Citadel*'s eerie opening synthesized speech would get your attention, it was the meticulous design of Michael Jakobsen's incredible game that kept you playing. Everything about *Citadel* felt amazingly fresh at the time of its release, from its ability to let you choose the sex of your character, to using the equivalent of an energy bar instead of the traditional lives. While it's predominantly a platformer at its heart, like *Castle Quest*, there are enough additional elements to it so it straddles adventure territory. It still looks a treat too, thanks to bright colourful sprites and interestingly designed environments. It's not the easiest of games due to some devious enemy placements, and some of the problems that Jakobsen ocassionally throws at you can take a while to solve, but there's no denying that this is a smashing little adventure that should take an absolute age to complete. *Citadel* received an obscure sequel late in the BBC's lifetime, so it's no surprise that it's the more well known original that has climbed so high in your list!

Thrust

PUBLISHER: Superior Software **YEAR:** 1986 **GENRE:** Exploration

4 While it's obviously inspired by the old coin-op *Gravitar*, *Thrust* is very much its own game and a great one at that. Jeremy Smith's masterful coding of the BBC Micro resulted in a fiendishly clever puzzle game/shooter that required you to explore caverns in an attempt to retrieve a precious pod. Once secured, it had to be returned to deep space so you could tackle the next stage.

Sadly, Jeremy himself is no longer with us, but he's left behind a satisfying challenging game that was so successful, it was ported to a huge number of other systems.



Exile

PUBLISHER: Superior Software **YEAR:** 1988 **GENRE:** Adventure

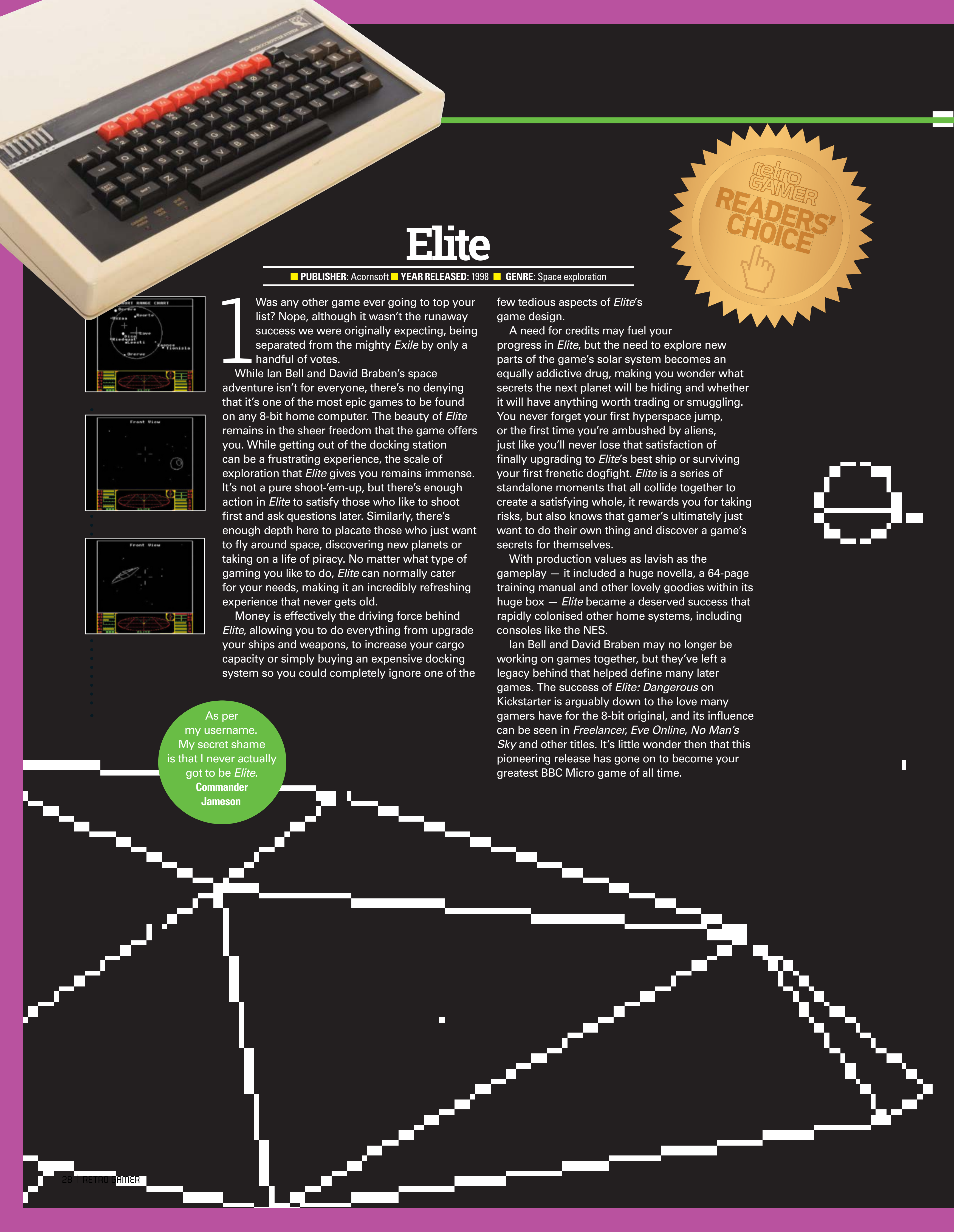
2 Your second favourite BBC game resulted in collaboration between two talented coders, *Thrust*'s Jeremy Smith and *Starship Command*'s Peter Irvin. The end result is a huge, expansive space adventure that's only eclipsed by another epic collaboration.

Taking control of intrepid protagonist Mike Finn, the aim of Exile is to explore the planet Phoebus as part of a rescue mission. Phoebus is huge in size and as detailed as Mark Cullen's enjoyable novella, which accompanied Exile's release.

The actual mechanics, borrow heavily from the games of both authors, but are also distinctly unique, thanks to its nonlinear gameplay, a handy life-preserving teleport system and impressive AI with enemies using line-of-sight vision.

The controls admittedly take a while to get used to, but as your jet pack's abilities open up, so to does the game. The end result is a truly astounding experience that is as enjoyable as it is atmospheric.





Elite

■ **PUBLISHER:** Acornsoft ■ **YEAR RELEASED:** 1998 ■ **GENRE:** Space exploration

1 Was any other game ever going to top your list? Nope, although it wasn't the runaway success we were originally expecting, being separated from the mighty *Exile* by only a handful of votes.

While Ian Bell and David Braben's space adventure isn't for everyone, there's no denying that it's one of the most epic games to be found on any 8-bit home computer. The beauty of *Elite* remains in the sheer freedom that the game offers you. While getting out of the docking station can be a frustrating experience, the scale of exploration that *Elite* gives you remains immense. It's not a pure shoot-'em-up, but there's enough action in *Elite* to satisfy those who like to shoot first and ask questions later. Similarly, there's enough depth here to placate those who just want to fly around space, discovering new planets or taking on a life of piracy. No matter what type of gaming you like to do, *Elite* can normally cater for your needs, making it an incredibly refreshing experience that never gets old.

Money is effectively the driving force behind *Elite*, allowing you to do everything from upgrade your ships and weapons, to increase your cargo capacity or simply buying an expensive docking system so you could completely ignore one of the few tedious aspects of *Elite*'s game design.

A need for credits may fuel your progress in *Elite*, but the need to explore new parts of the game's solar system becomes an equally addictive drug, making you wonder what secrets the next planet will be hiding and whether it will have anything worth trading or smuggling. You never forget your first hyperspace jump, or the first time you're ambushed by aliens, just like you'll never lose that satisfaction of finally upgrading to *Elite*'s best ship or surviving your first frenetic dogfight. *Elite* is a series of standalone moments that all collide together to create a satisfying whole, it rewards you for taking risks, but also knows that gamer's ultimately just want to do their own thing and discover a game's secrets for themselves.

With production values as lavish as the gameplay — it included a huge novella, a 64-page training manual and other lovely goodies within its huge box — *Elite* became a deserved success that rapidly colonised other home systems, including consoles like the NES.

Ian Bell and David Braben may no longer be working on games together, but they've left a legacy behind that helped define many later games. The success of *Elite: Dangerous* on Kickstarter is arguably down to the love many gamers have for the 8-bit original, and its influence can be seen in *Freelancer*, *Eve Online*, *No Man's Sky* and other titles. It's little wonder then that this pioneering release has gone on to become your greatest BBC Micro game of all time.

As per my username. My secret shame is that I never actually got to be *Elite*.
Commander Jameson

Best In Every World

Elite co-creator David Braben celebrates the game's enduring success

How do you feel about *Elite* being the greatest BBC game?
It's great, and I'm glad so many people voted for it!

Why choose to create *Elite* on the BBC?
In those days, it wasn't a case of working out the best markets or anything. I had an Acorn Atom, which was pretty close to a BBC Micro – and I had tweaked the software to make it more like a BBC, and the hardware to make it run at 2MHz (same as the BBC). Ian had a real genuine BBC. Neither of us could afford another computer so realistically the choice of any other platform didn't exist until we'd earned money from the game.

What does it offer over the other 8-bit versions?
It was the first! The BBC had a 2 MHz (yep – not GHz!) 6502 CPU – by far the most powerful of the 8-bit generation machines, and in practice faster than a 4MHz Z80 (as found in the Spectrum), even though the number makes it sound better. This meant the framerate was higher. On some of the machines like the C64 (which had a 1MHz 6510 – similar but not quite as good as a 6502), we had a lot more memory, so used data tables to make the game go faster, but we didn't quite get a factor of two, so it was slightly slower than the BBC, but had more missions, music etc.

How does it differ from the Electron version?
The Electron was technically similar to the BBC Micro, but the screen display chip was not so programmable. On the BBC Micro we dropped the resolution a little from 320x256 to 256x256 – which made the rendering about 20 per cent faster (in 8-bit code 256 is a much easier number to multiply by than 320), and it dropped the screen memory from about 10K to 8K. Losing 2K from our total of about 20K of code was agonising. We lost quite a few ships, missions, and other details. Also we couldn't change colour for the dashboard as we did on the BBC – hence the black and white display.

Why do you feel that *Elite* remains so popular?
For the time and since, it was pretty iconic. It didn't follow the mantra of so many of the other games at the time with three lives, short play time, and in many cases direct copies of games from the arcades. It had so many firsts to its name (first open world game, first with a novel, etc.), this has helped it stand the test of time.



Five Reasons Why It's Great

1. It offered a sense of scale and exploration that few other games of the time could offer.

2. *Elite*'s open-ended gameplay allowed you to experience the universe on your own terms.

3. Here is a technically incredible piece of coding that not only made the BBC incredibly desirable, but still holds up today.

4. It helped set a new standard for big triple-A games thanks to its incredibly lavish extras.

5. It's treated to a resounding number of very good ports, meaning anyone could enjoy it, regardless of system.

Elite on the BBC is better than every other game on every other 8 bit computer and everything that followed… and I'm a Spectrum fanboy. *Elite* was just something special. Best game ever written in my opinion.
ianpmarks

Peripheral Vision



ESSENTIAL GAME

Warlords

This cross between *Quadrapong* and *Breakout* isn't just one of the best games to use the paddle controller, but one of the best multiplayer games ever. Up to four players can compete to survive a fierce battle, with each defending their castle from the fireball (and later, multiple fireballs) on the battlefield. The controller's button can be used to hold the projectile, allowing players to line it up for shots at specific players. The game is fast and frantic, and remains just as enjoyable today as it was in the early Eighties. Bring it out at your next multiplayer session!



Paddle Controller

» **PLATFORM:** ATARI 2600 » **RELEASED:** 1977 » **COST:** £12

Although the Atari 2600 came packaged with joystick controllers for playing *Combat*, gamers of the late-Seventies were extremely familiar with rotary controllers thanks to the popularity of *Pong* and other such games based on it, so it's no surprise that Atari created the paddle controller to cater for such games. The peripheral consisted of a handset with a fixed-range dial and one button, and launched alongside the console itself. Unusually, paddle controllers came in pairs as standard – two handsets were wired to each connector, allowing up to four players despite the machine's two controller ports. Initial releases included *Blackjack*, *Street Racer* and *Video Olympics*.

If you're picking up a paddle controller today, it's likely that it will suffer from jittering movement due to dirty electrical contacts. If you're not confident with disassembling hardware, make sure you get one that's already been serviced! Once you've secured a working specimen, you'll find that the controller was relatively well-supported over the years, with a few dozen titles developed during the system's prime. These included licensed *Star Wars* and *GI Joe* games from Parker Brothers, infamous adult titles such as *Beat 'Em & Eat 'Em* and Activision's classic *Kaboom!* – one of the best games on the system overall. *

Paddle Fact

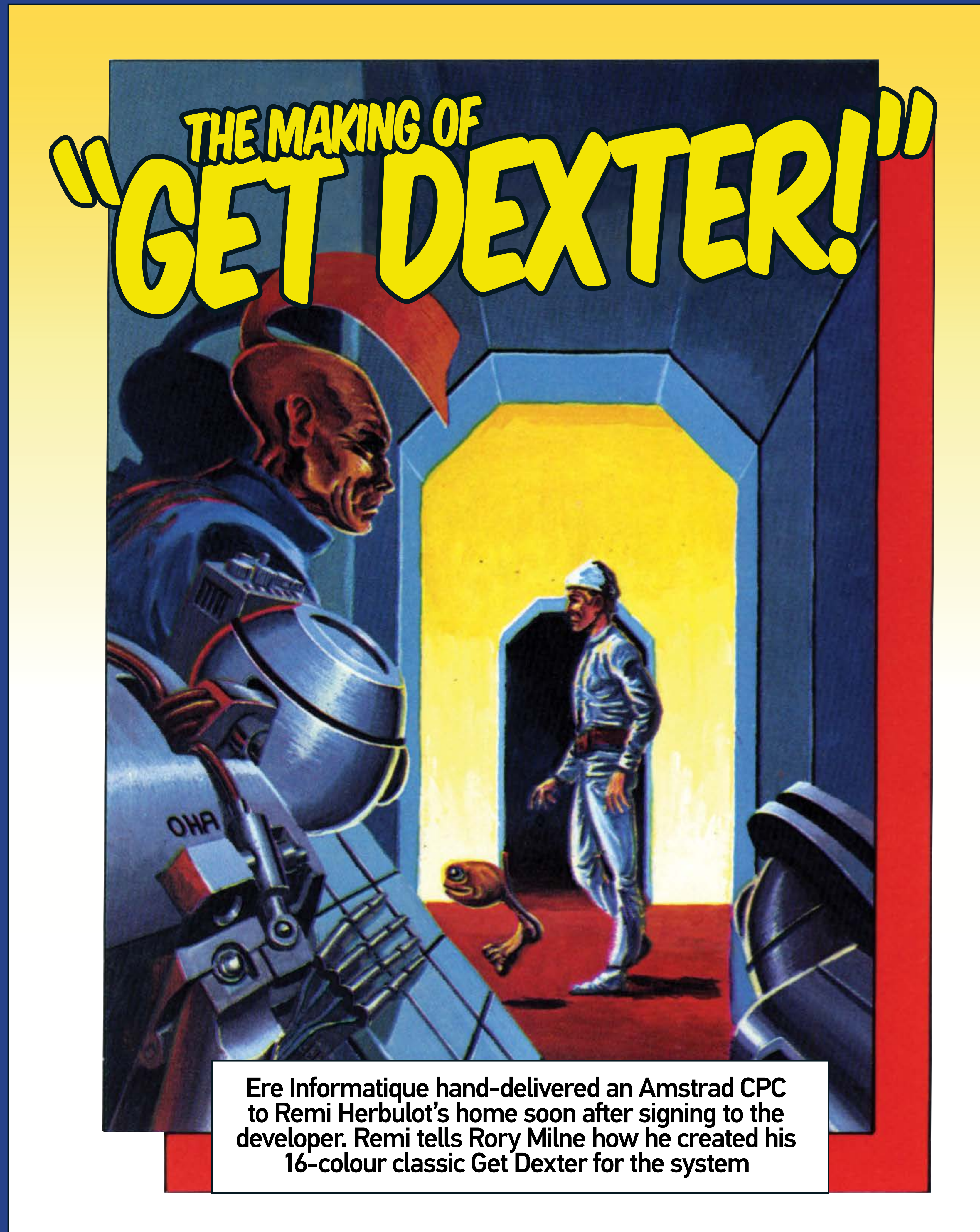
■ Atari's driving controller was very similar to the paddle controller, but had a dial capable of continuously spinning in a single direction. Only a single controller attaches to each port, unlike the paddle controller.

STATS

RANGE OF MOVEMENT: 330°

BUTTONS: 1

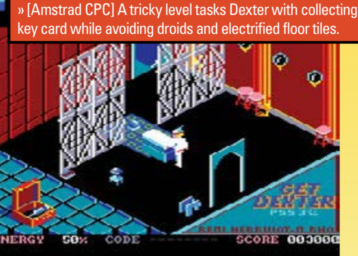
THE MAKING OF "GET DEXTER!"



Ere Informatique hand-delivered an Amstrad CPC to Remi Herbulot's home soon after signing to the developer. Remi tells Rory Milne how he created his 16-colour classic Get Dexter for the system



» [Amstrad CPC] Dexter's mission begins by dropping an explosive candle in the path of an antagonistic droid.



» [Amstrad CPC] A tricky level tasks Dexter with collecting a key card while avoiding droids and electrified floor tiles.



» [Amstrad CPC] Having extracted a digit of code from a scientist, an energy-depleted Dexter flees the scene.

By the mid-Eighties, the Parisian games publisher Ere Informatique was already well-established having set up shop in 1981. But coder Remi Herbulot remembers signing with the firm for its passion as much as its experience. "When I finished my first game, *Macadam Bumper*, I went to Paris and met several publishers," he tells us. "I found that the people at Ere Informatique were as passionate about games as I was. They believed in freelance developers. This kind of publisher was exactly what I needed. I was developing games for the Oric at the time. The Ere guys gave me a ZX Spectrum, and, as soon as it came out, an Amstrad CPC. The colours were so appealing that it was rapidly my favourite computer."

Remi's first CPC work was a port of *Macadam Bumper*, but a Spectrum chart-topper and a life-long love of sci-fi helped inspire a second Amstrad project. "I'd been very impressed by *Knight Lore* on the Spectrum. I liked it a lot, but I wanted to do something different, leaning more towards adventure and sci-fi, and also more colourful, using the more elaborate graphics that the Amstrad permitted. I grew up in the Sixties, during the space conquest. Very young, I had pinned above my bed all the rocket photos I could find, or the Earth seen from space. I was reading a lot of sci-fi at the time… Arthur C. Clarke, Asimov, Paul Anderson, Phillip K. Dick… I'm pretty sure that I started from the idea of being teleported with a mission into a futuristic complex to be explored."

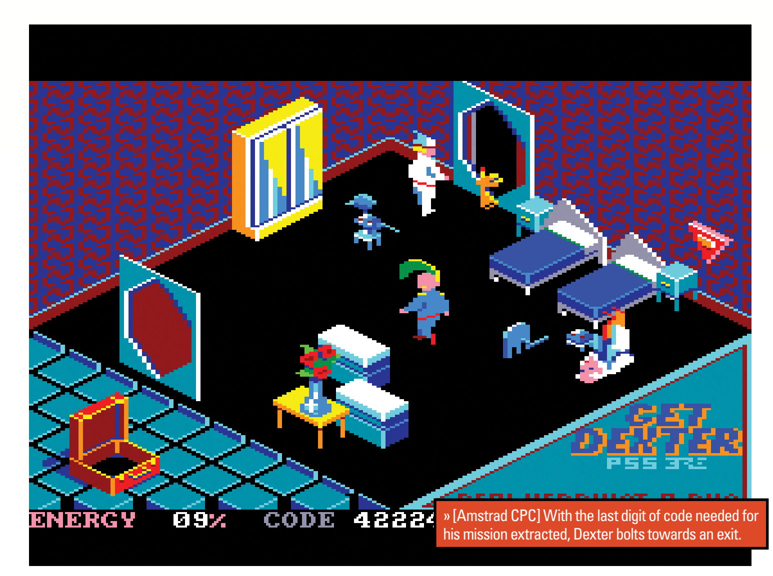
Intrinsic to Remi's isometric sci-fi mission would be Ere artist Michel Rho and an android hero named Crafton who soon gained a 'podocéphale' sidekick called Xunk. "The very first idea was to do some kind of ball floating around Crafton, in the same way as the 'bit' that appears in the *Tron* movie. After several tries, I found it was not possible to render it properly because of the graphic limitations; a ball was much too small and it didn't look like it was floating. So I asked Michel Rho to design a doggy thing and he came back with Xunk… a head on a foot!

> **"I'd been very impressed by Knight Lore, but I wanted to do something more colourful using the more elaborate graphics that the Amstrad permitted"**
> Remi Herbulot

So strange, but I liked it immediately; it was so funny to watch him move. 'podocéphale' is very close to the French word 'monocéphale' – monocephalic in English – which means 'one head'… So, as 'pod' relates to the foot – as in podiatrist, for instance – podocéphale means something like 'one head on a foot.' The idea was to give Crafton a helpful friend… I wasn't able to do everything I wanted – such as the possibility to have Xunk go and fetch an object, just like a dog."

Crafton and Xunk would prove inseparable, but Remi remembers coding alone in his Caen home while development partner Michel built sprites in Ere's Paris offices. "I worked alone most of the time. The computer I worked on was a Amstrad CPC 464, with two floppy drives. It was extended to 512K, a much more comfortable setup. I lived 200 miles from Paris, [but] Michel had a perfect understanding of the very many technical limitations. He was an expert; I remember when I first saw the loading screen for *Macadam Bumper* on the Spectrum I was stunned. There were plenty of colours although the Spectrum allowed only two colours in an 8x8 square. On the artistic side, I preferred to leave him all the freedom to create."

In a case of taking the rough with the smooth, Remi programmed around the CPC's memory and processor limitations while embracing its 16-colour mode. "I coded everything from scratch in assembly language. [There was] no particular tool or game engine. The two difficulties were the lack of space – everything had to fit in 46KB – and low CPU speed. It was a permanent struggle. Critical routines were written and rewritten, sometimes to gain only ▶

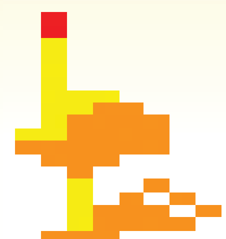


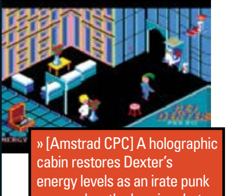
» [Amstrad CPC] With the last digit of code needed for his mission extracted, Dexter bolts towards an exit.



GET DEXTER 101

■ Standing out from the isometric crowd thanks to free-form gameplay and the experimentation afforded by a replenishable energy bar, *Get Dexter* delivers a sophisticated blend of logistical puzzles, platforming and problem-solving. This CPC classic looks as good as it plays thanks to skilful use of the system's 16-colour mode.

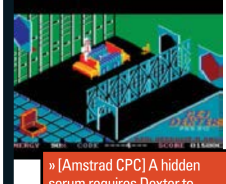




» [Amstrad CPC] A holographic cabin restores Dexter's energy levels as an irate punk approaches the heroic robot.



» [Amstrad CPC] Alien sidekick Scooter bounces on a red floor tile to indicate that it opens a locked door.



» [Amstrad CPC] A hidden serum requires Dexter to rearrange some furniture while dodging any droids.



IN THE KNOW

» **PUBLISHER:** Ere Informatique
» **DEVELOPER:** Remi Herbulot and Michel Rho
» **RELEASED:** 1986
» **PLATFORM:** Amstrad CPC
» **PLATFORM:** Arcade/adventure

THE FRENCH CONNECTION

More great Gallic games that wowed UK gamers



DOOMSDAY BLUES

SYSTEMS: Amstrad CPC, Atari ST, PC
YEAR: 1987

Patrick Dublanchet's quirky game depicts a jailbird attempting a prison break. He has to find food to keep his strength up, kick down doors and learn his guards shifts in order to avoid punishment.



BUBBLE GHOST

SYSTEMS: Various
YEAR: 1987

Infuriating yet satisfying, *Bubble Ghost* is essentially a puzzle game with the whimsical objective of helping a cute ghost blow a bubble safely from screen to screen past untold dangers and elaborate set-pieces.



GET DEXTER 2

SYSTEMS: Amstrad CPC, Atari ST
YEAR: 1988

Remi's *Get Dexter* sequel – *L'Ange De Cristal* in France – isn't just bigger in size; it has bigger ideas and its stages feel less modular. Visually, this it packs in even more detail than its predecessor.



CAPTAIN BLOOD

SYSTEMS: Various
YEAR: 1988

An incredibly absorbing game once you get your head around it, *Captain Blood* employs a point-and-click interface with which you have to destroy planets and grill alien life-forms in the course of hunting down your clone.



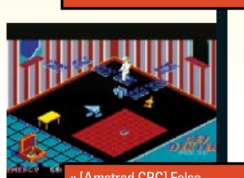
PURPLE SATURN DAY

SYSTEMS: Various
YEAR: 1989

Comprising of four minigames tied by an interstellar challenge narrative, *Purple Saturn Day* has you race the rings of Saturn, destroy balls of light, rewire a computer brain and catch shooting stars.



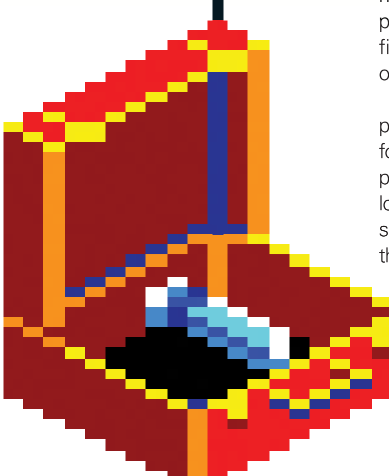
» [Amstrad CPC] Objects lie past broken glass, but Dexter can bridge the hazardous debris with furniture.

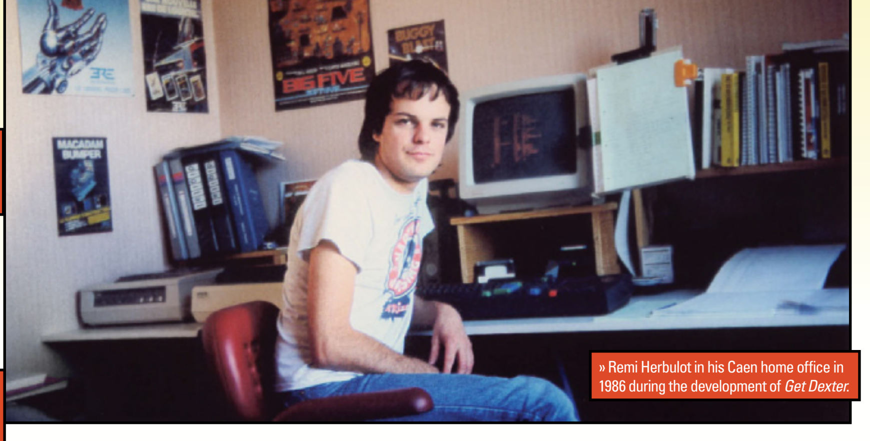


» [Amstrad CPC] False perspective makes steps tricky, and progress depends on nabbing the key card below.



» [Amstrad CPC] One accidental step on this level's red floor tiles sends Dexter sliding across the room.





» Remi Herbulot in his Caen home office in 1986 during the development of *Get Dexter.*

▶ one CPU cycle. For example, one of the tricks to speed up the game was to 'unfold' the program main loop to avoid time-consuming jumps. In my mind, the 16-colour option was justified; the idea was to have the most elaborate graphics possible, to immerse the player into a different world. I don't remember thinking about the difficulty of conversion to other computers. At the time, my motto was to go ahead and solve problems when they come! Also, my first goal was to create a good game on the Amstrad."

Meanwhile, artist Michel Rho produced glorious 16-colour sprites for Remi – including a punk who had previously graced *Macadam Bumper*'s loading screen. "Michel did some sketches on paper, but he worked on the computer mainly. He had a little graphic utility to draw the sprites, but it was very crude software. Michel was very good at working with pixels. He designed the rooms, robots and android characters. The room walls used a tile system. I was very happy with everything he created. Sometimes, the shape of a particular robot influenced the gameplay – such as the one on which you can jump on to be transported; the idea came to me after having seen the robot. [The punk] was a little joke of ours… There were still a lot of punks in Paris at the time and Michel was amused by the look. It was also a wink at a famous French comix character created by Frank Margerin: a "Fifties rocker with a prominent Teddy Boy cut!"

Like Michel's sprite design, Remi's approach to level design combined low and high-tech. "I used a map on paper and then did a lot of tests. It was a simple aerial view to check positions of objects, foes… As I was testing only a small portion of the entire game, I needed to check the position of everything. The important thing was that the player was never stuck. Also, there were five starting points and many ways to go, so I had to check that no routes left the player in a dead end. The map was quite consistent but not 100 per cent."

As his project took shape, Remi introduced object-based gameplay to allow Crafton to thwart his opposition, which would in turn encourage exploration. "Robots and androids acted like antibodies, they tried to neutralise you because you did not belong there. The objects allowed me to introduce interaction; there was a neutralising object for every foe and the player had to find which one. I wanted to create a game in which exploration was a major part of the fun of playing."

The addition of a touch-sensitive floor tile mechanic enabled Remi to create level interactions as diverse as unlocking doors and having Crafton slide on his *derrière*! "This was only a way to add interactions, a system which consumed not too much of memory and CPU. If I remember well, the first usage I had in mind for the floor pads was to act as a command to open a door; you had two or three pads and Xunk could help you to know which one was the one to use. The memory was so limited that I had to find all the interaction I could using the same graphics… So the large electrified zones came quickly after that. The sliding area was a little joke!"

As evolving gameplay and mechanics increased the challenge of Remi's multi-roomed project he deployed energy-restoring booths to balance out its difficulty. "It was designed to be difficult enough but not too much! At the time, players used to prefer difficult games, drawing a map on paper was part of the fun of playing… Actually some players found it too easy. The balance was delicate and a matter of constant wonder when developing. There was no saving procedure – most players didn't

have a floppy disk yet – so running out of energy meant that you had to restart from the beginning. This was severe! So, it was important to memorise the location of the holographic booths – a wink to *Doctor Who*, by the way."

Remi also helped Michel to produce a comic strip backstory for their bitmap heroes Crafton and Xunk to be included with their finished game. "I did write the basic elements of the story, but Michel Rho was responsible for the comic strip. I was happy with it – it's funny!"

Named after Remi and Michel's heroic pair, '*Crafton & Xunk*' met with unanimous praise from French gamers and critics alike, which both pleased and overwhelmed Remi. "I was very pleased of course! But you know you need time to realise. When you create a game, you are working alone, day and night, you don't go out. Someday, you show the game to your publisher and everybody has something to tell you. It is like coming out of a cavern…"

If anything, Remi was even happier with his game's reception across the Channel, despite it being renamed '*Get Dexter*' and Crafton and Xunk becoming 'Dexter' and 'Scooter'. "Having reached the highest position in the English chart was a real accomplishment. You know, at the time, all the games I was playing were English, all the game creators I admired were English… So, yes, it was much more important to me to have good reviews in England. Really. The English distributor considered that '*Crafton & Xunk*' was not a good name, that it didn't sound good in English. I was not very happy to have a different name, but I trusted its judgment."

Just two conversions followed, with the MSX2 port posing more problems for Remi than the ST adaptation. "Converting to Atari ST was not that difficult – more memory, more speed, powerful debugging tools. The only thing was to get used to a different processor, but it wasn't a problem. MSX2 was a little bit more difficult because of some buggy tools and the odd pre-production computer I had."

When asked if he would make changes to his classic, Remi is certain he would tweak all of his games but leaves no doubt as to the title closest to his heart. "There are always things that could be changed. But, to tell you the truth, for every game I created, I have avoided to play the game after it's released; it's a nightmare! You see all the faults, all the points you should have changed. It is different today with updates…But *Crafton & Xunk* is my most cherished game, because of the good response in England." *

Our thanks to Remi Herbulot for sharing his memories.



» [Atari ST] Remi Herbulot didn't find porting *Get Dexter* to the Atari ST too difficult a task.

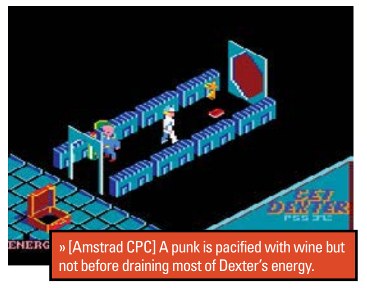
"The English distributor considered that 'Crafton & Xunk' was not a good name. I was not very happy, but I trusted its judgment" Remi Herbulot

DEVELOPER HIGHLIGHTS

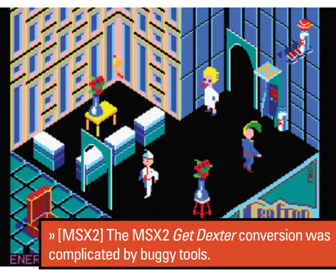
GET DEXTER
SYSTEM: Amstrad CPC, Atari ST, MSX2
YEAR: 1986

GET DEXTER 2 (PICTURED)
SYSTEM: Amstrad CPC
YEAR: 1988

PURPLE SATURN DAY
SYSTEM: Various
YEAR: 1989



» [Amstrad CPC] A punk is pacified with wine but not before draining most of Dexter's energy.


» [MSX2] The MSX2 *Get Dexter* conversion was complicated by buggy tools.

GET DEXTER 2016 Q&A WITH REMI HERBULOT

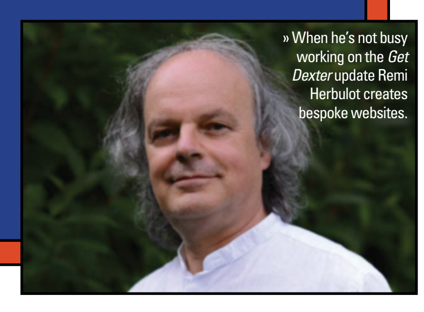
How Remi plans to update a classic for a new generation of gamers

What made you decide to update *Get Dexter* for modern platforms?
Actually, it was not my idea. One day, I received a message from the programmer Eric Nicolas who had played *Crafton & Xunk* when he was young in the Eighties. When he told me he'd like to do a conversion and how he'd do it, I was immediately excited by the idea.

What sort of enhancements will the update feature?
It has the exact reproduction of the 1986 game but also a 'new' version with updated graphics and some changes to the gameplay. The most obvious addition is the automatic saving procedure, but there are others: the auto-map, a couple of tutorial rooms, and so on…

Have there been many challenges to overcome?
In the new version, the [game] map is drawn with a program and we had to move some doors a little so that they lead to the proper rooms.

Which platforms will the update run on, and when will it be released?
The game will run on iOS, Android, Windows… It should come out early in 2016.


» When he's not busy working on the *Get Dexter* update Remi Herbulot creates bespoke websites.

CLASSIC MOMENTS

Fat Worm Blows A Sparky

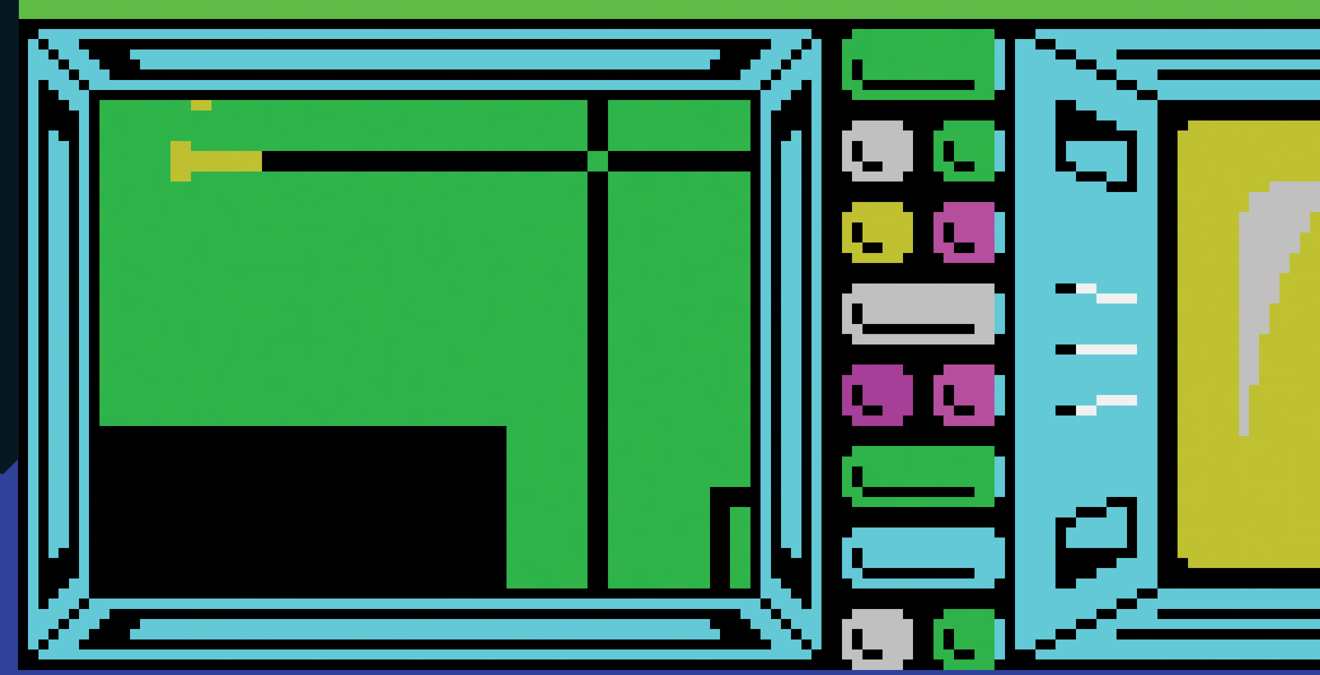
» **PLATFORM:** ZX SPECTRUM » **DEVELOPER:** JULIAN TODD » **RELEASED:** 1985

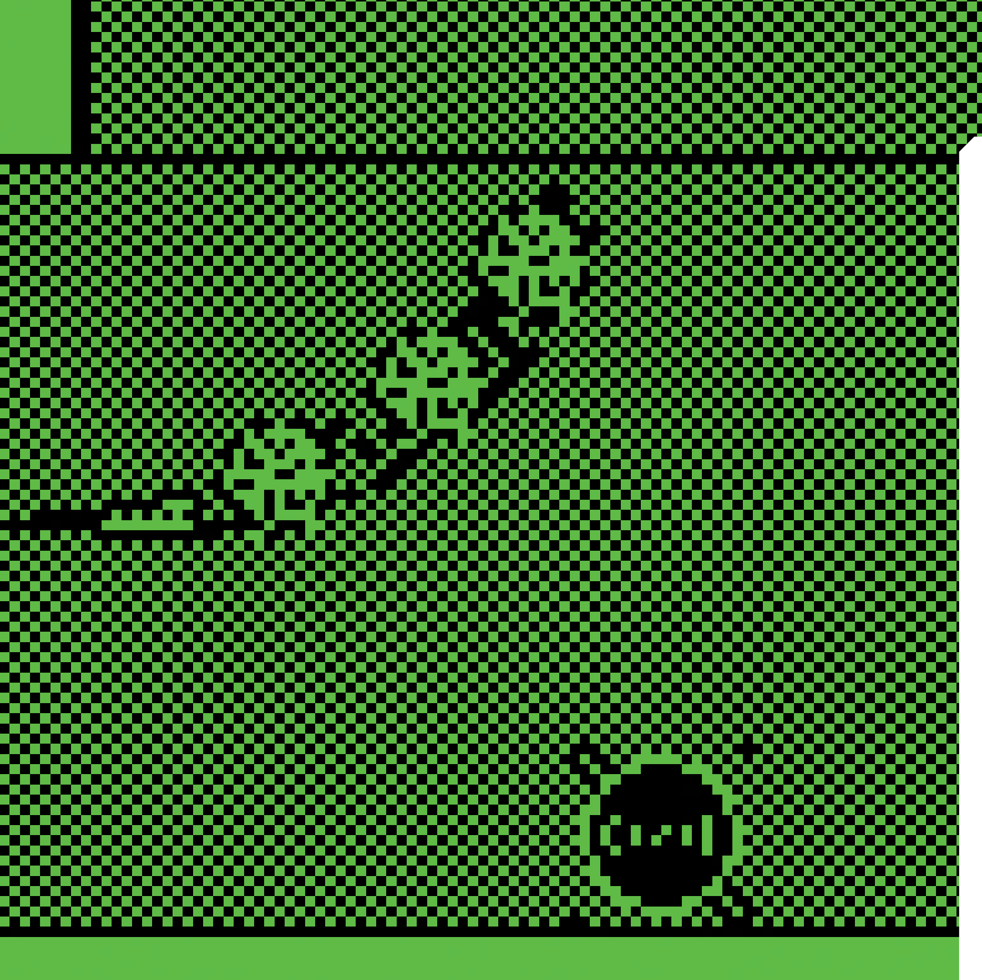
***Fat Worm Blows A Sparky* is by no means an easy game.** You've got to pick up 50 spindles across a massive ZX Spectrum motherboard, then make it back to the disk in time to be copied, all while being chased by bugs. Oh, and you can only survive three hits – a fairly standard number, but given the swiftness and numerousness of the enemies, it doesn't feel particularly generous. However, the game is not exclusively cruel to players. It's entirely possible for you to regain your health, but like everything else in the game, it's not an easy task.

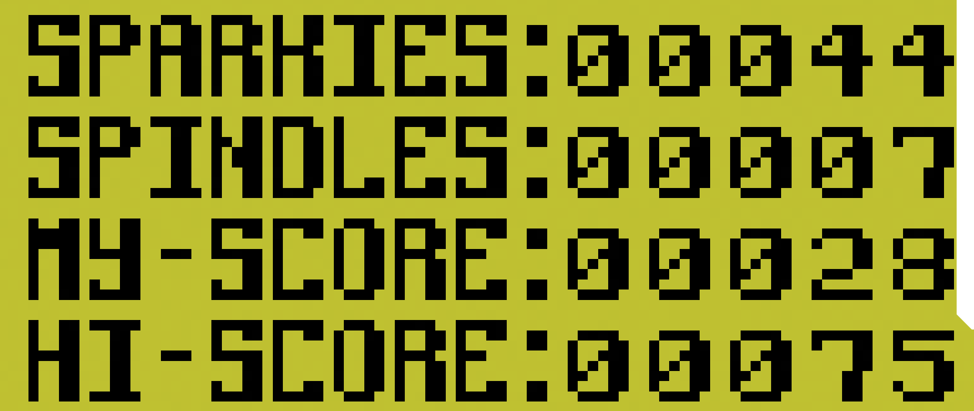
Removing the bugs that have attached themselves to the worm requires a trip to the Debugger, a black and white striped block. Passing under it will restore you to full health, but first you have to find one, and they're not easy to come across. You'll never know relief quite like coming across a Debugger when you've got three bugs attached – against all the odds, you're going to live on to fight another day. *

BIO

You'd think that a game titled *Fat Worm Blows A Sparky* would draw some attention – and you'd be right. Far from just being an unusual name, Julian Todd's debut game was made entirely in machine code and sported fast-moving solid 3D graphics. *Crash* was impressed and awarded the game 95%. However, it would be Julian Todd's last game – after finishing his university studies in the early-Nineties, he was unable to return to the games industry. Today, he's better known as an author of sci-fi short stories and one of the minds behind TheyWorkForYou, a parliamentary data website.

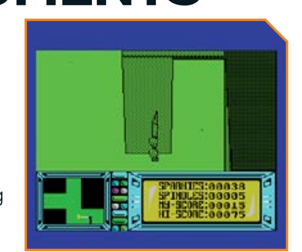






MORE CLASSIC FAT WORM BLOWS A SPARKY MOMENTS

Level Up



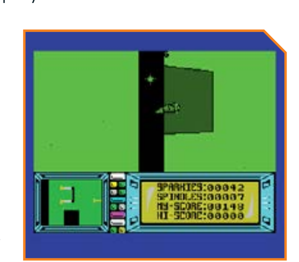
The first time you see a wedge in *Fat Worm Blows A Sparky*, you come to realise that the 3D effect isn't just a very fancy way of drawing a maze – it's actually a very effective way of conveying the illusion of depth and opening up a larger playing area from the usual top-down perspective. Quite a few spindles are hidden away on upper levels too, so get searching!

Bug Blaster



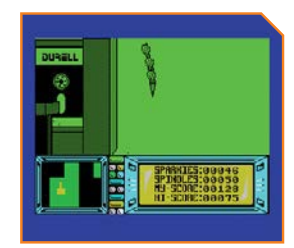
Our heroic worm will come under attack from all directions during the course of a game, with both aerial and ground-based baddies to contend with. As the game goes on, they become very persistent and numerous, making for some intense battle situations. Luckily, you can both shoot sparkies and lay them as rising mines. Let's hope you didn't waste them earlier!

Riding The Bus



If you've ever been caught in a firefight on *Fat Worm Blows A Sparky* and find yourself running low on the titular Sparkies, you might start to panic – especially if you're looking for the last few spindles. Don't worry, though, as extra Sparkies can be found running along the data bus for you to collect. All you have to do is find your way up there…

Victory!



In a game as difficult as *Fat Worm Blows A Sparky*, reaching the end is a legitimately impressive achievement, although we'd reccomend you refrain from putting it on your CV. If you managed to collect all 50 spindles and make it back to the Durell disk to be copied, you could claim serious bragging rights – and no doubt you'd be quite relieved to have finally done it, too.

DIGGER T. ROCK™

THE LEGEND OF THE LOST CITY



IN THE KNOW

» **PUBLISHER:** Milton Bradley
» **DEVELOPER:** Rare
» **RELEASED:** 1990
» **PLATFORM:** NES
» **PLATFORM:** Dig-'em-up

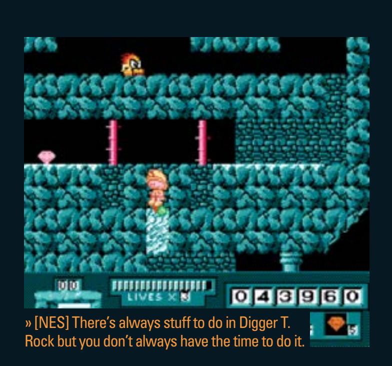
Glance at the list of titles on the recently released Rare Replay and with familiar names like Knight Lore and Jetpac you'll spot a little known NES game. Paul Drury unearths the story of Digger T. Rock with the help of chief miner Andy Walker

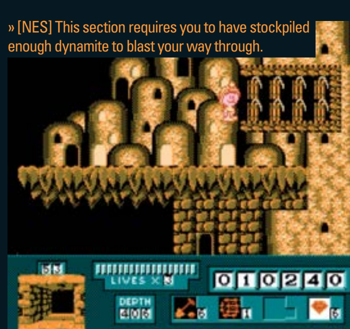
It all started with a phone call. "It was Tim Stamper, out of the blue," remembers Andy Walker, creator of *Digger T. Rock*. "I had not talked to the Stampers for years but they were the sort of people that you'd want to get a call from. Tim's opening line was, 'Remember *The Pit*?'"

Of course Andy remembered the coin-op that had begun his videogame career. Back at the start of the Eighties, he and his employee Tony Gibson had created *The Pit* using customised Tangerine machines. When American publisher Centuri picked up the title for release in 1982, they recoded it to work on their bespoke arcade hardware and then Chris Stamper converted that version to run on a *Galaxian* board for the UK market. If you ever played the fine tunnelling and jewel-snaffling game in this country, you were actually playing one of the Stampers first published titles, before they moved their magic on to the Spectrum as Ultimate Play The Game and Nintendo consoles as Rare.

The Pit was a huge commercial success and helped fund Andy's next venture. Taskset became one of the premier Commodore 64 developers of the first half of the Eighties, responsible for such esoteric hits as *Bozo's Night Out* and the *Super Pipeline* series, but financial pressure let to the closing of the company in 1985. Andy continued as a freelancer games developer, working on such titles as *Uchi Mata* and *Dragon's Lair* for the C64, and in 1988 was working on *Chevy Shuttle* for the Amiga when he received that rather unexpected call from Tim Stamper.

Tim's plan was to update *The Pit*, capitalise on the gameplay elements that had made it such a money spinner, and create a console title for Rare's illustrious Japanese partners, Nintendo. The NES was new territory for Andy, though, so he immediately bought a top-of-the-range Amstrad PC, with a hefty 20MB hard drive, as the heart


» [NES] There's always stuff to do in Digger T. Rock but you don't always have the time to do it.


» [NES] This section requires you to have stockpiled enough dynamite to blast your way through.


» [NES] Collecting dynamite becomes crucial, particularly when tackling later levels.

of his development system and decamped to the upstairs bedroom of his Bridlington home to begin work.

"Actually, there were lots of commonalities between the NES and C64," notes Andy. "It had sprites and you could scroll in any direction. It was friendly hardware and I felt at home, though I'm greatly indebted to Chris Stamper for much mentoring and encouragement. And Tim was quick to say, 'That's good, that's crap, now why don't we do it this way?' Nothing was precious…"

The game developed very much as an open and honest conversation between Rare and Andy. Large sheets of graph paper began to spread across the wall of his homely development studio, with sketches for caverns and scribbled notes suggesting a rock here, a diamond there and a pesky giant mosquito to attack you unexpectedly as you dropped from that ledge. The cave system that the determined Digger descended into expanded as if Andy was scooping out the earth as he went, creating passageways, rocky outcrops and secret tunnels.

New features evolved to help our trusty miner navigate the cavernous levels, so now he could drop a rope ladder into the depths to prevent a fatal fall and use dynamite, *H.E.R.O.*-style, to blow up cave walls on the way to the exit. Power-ups could be dislodged by bashing the stony ceiling, giving super strength or the handy ability to chuck rocks to flatten advancing foes. There were hidden shortcuts and level warps to discover… hang on, Andy, isn't this sounding like a job for a certain plumber we know?

"Yes, *Mario* was definitely an influence," he grins. "There's so much in those games, it's bound to be an influence on anything NES."

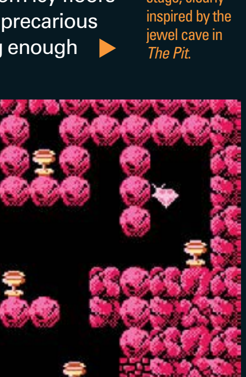
"That feeling of opening a cavern for the first time, that sense of discovery, those are real Tutankhamun moments!"

Andy Walker

What *Digger* shares with the superlative *Mario* series is that thrill of fresh discoveries. When you stumble through a concealed entrance and a whole new section of the cavern opens up or you slip through a hidden crawl space on your belly and find yourself transported to a forgotten hollow, with diamonds glinting in the dark, you realise there's so much more to this underground world than a glance can reveal. You have to explore and experiment and never tire of tapping your trusty shovel against your rocky surroundings, hoping to make a breakthrough. "That feeling of opening a cavern for the first time, that sense of discovery," Andy muses, proudly, "those are real Tutankhamun moments!"

There is treasure to be found, of course, though your first priority is to locate the correct column that, once stood on, will open the doorway to the next cavern. In early levels, this is pretty straightforward, but as your quest for the mythical Lost City progresses, the task becomes increasingly arduous, culminating in the eighth and final cave having more columns strewn through it than ancient Athens. You'll require the patience of Penelope to step on each until you finally unlock that last barrier. "Honestly, the plan was never to f**k the player up," Andy assures us with a malevolent chuckle. "You can mislead them, but that's all."

Exploring the expansive levels and negotiating everything from icy floors to floating platforms and precarious boulders would be taxing enough ▶

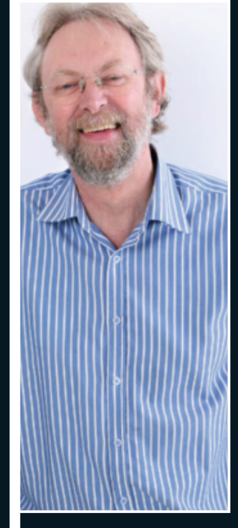



» [NES] Each level concludes with a bonus stage, clearly inspired by the jewel cave in *The Pit*.


» [NES] The T-Rex is one of the more vicious foes Digger must face.

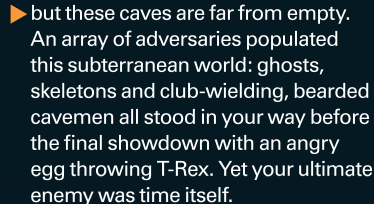
DIGGER T. ROCK 101

■ Adventurous underground man Digger T. Rock is tasked with negotiating his way through eight expansive caverns in search of the fabled Lost City. In his way stand numerous subterranean nasties, from vicious insects to enraged dinosaurs, as well as helpful equipment to collect to ease his journey. Combining exploration with close combat – your shovel serves as a useful weapon as well as a tunnelling tool – and some puzzle elements, the game is varied, challenging and full of secrets to uncover.


» Andy Walker is best known for his *Super Pipeline* games and forming Taskset.







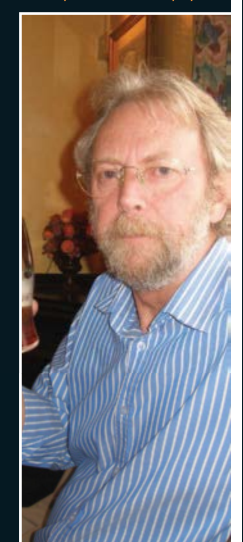
DEVELOPER HIGHLIGHTS

SUPER PIPELINE
SYSTEM: C64
YEAR: 1983

POSTER PASTER
SYSTEM: C64
YEAR: 1984

GYROPOD (PICTURED)
SYSTEM: C64
YEAR: 1984

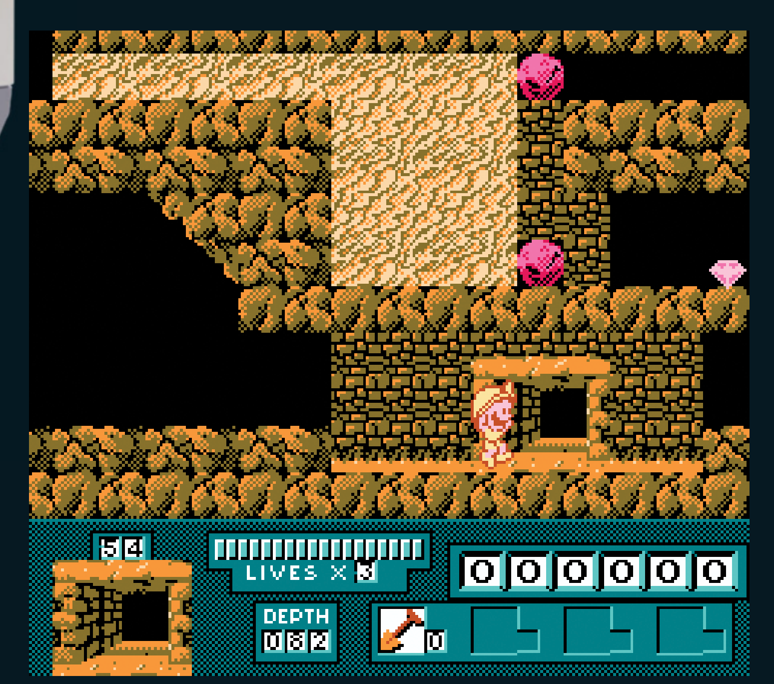
» Andy was surprised to see *Digger T. Rock* appear on the recently released *Rare Replay*.



▶ but these caves are far from empty. An array of adversaries populated this subterranean world: ghosts, skeletons and club-wielding, bearded cavemen all stood in your way before the final showdown with an angry egg throwing T-Rex. Yet your ultimate enemy was time itself.

"It was about exploring but we also wanted this time pressure," explains Andy. "Yes, you got out but look what you missed! You didn't get enough diamonds and you're going to need more dynamite later on. That was what *Digger* was about. There was always things to do but you better not because you won't make the exit in time. The whole gameplay of *The Pit* was based on the panic notion that you were going to run out of time… and you make poorer decisions when there are only seconds left."

Those of you familiar with *The Pit* will remember the 'Zonker' – the tank at the top of the screen that steadily blasted through a small hill, getting ever closer to destroying your spaceship, your only means of escape to the next level. That sense of urgency wasn't the only gameplay element *Digger* co-opted from its arcade forebear. If you do reach the exit, Mr T. Rock finds himself in an enclosed cave strewn with jewels to plunder if he can dodge a hail of rocks, a direct update of the gem room in *The Pit*.



» [NES] A delighted Digger finds the exit. It's all downhill from here, little man.

C64 gamers will also spot nods to Andy's past games throughout *Digger*. The way you enter your initials on the score table is directly lifted from *Super Pipeline* and the cartoon humour and graphical wit are very much in keeping with his Taskset titles. "Hitting the baddies with the spade and the little swipe marks and movement blur and skidding on your arse over the ice, Tim and I knew that would make it funnier," Andy smiles. "You're absolutely right with the link to Taskset days. It's in the DNA isn't it? There's a certain smugness in it, too, which usually comes before a fall…"

After 18 months of work, *Digger* was nearing completion, though not before the Stampers reminded Andy he needed to produce a 60Hz version for the American market alongside the UK's 50Hz one, requiring an almighty three month effort to make everything work in the shorter refresh time. The Rare boys were with him all the way, though, providing graphical data, technical support and plenty of warm welcomes when he made his frequent visits to their manor house headquarters in Twycross.

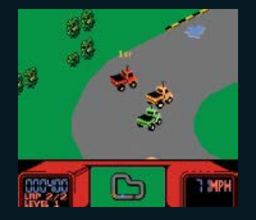
"I remember thinking, 'Gosh, what a big drive the Stampers have

RARE'S ESSENTIAL NES GAMES

The was still plenty of goodness after Ultimate transformed into Rare









COBRA TRIANGLE

■ *River Raid* meets *Micro Machines*, this shooter has you dodging various water-based hazards and blasting rivals while racing to the finish line in your powerboat. Waterfall jumping and battles with sharks and water wyrms keep things interesting in one of Rare's early NES games.

SNAKE RATTLE 'N' ROLL

■ More isometric adventures, this time featuring a pair of snakes determined to scoff enough 'Nibbley Pibbleys' to bulk up and unlock the level exit by popping on the weighing scales. The action is frantic, with lots of visual humour and a rocking score by David Wise.

BATTLETOADS

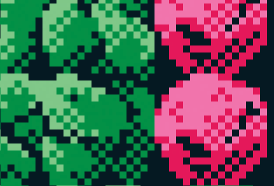
■ Probably Rare's best-known NES title, these pugilistic amphibians were clearly created to grab a slice of the scrolling beat-'em-up pie from those hugely popular teenage turtles. Great fun in co-op mode, mainly because you can act very uncooperatively, *Battletoads* is loved by many.

RC PRO AM

■ Though *RC Pro Am* stands in a long line of isometric racers, it can hold its bonnet up high. Taking inspiration from Atari's *Super Sprint* with a hint of Ultimate's own Spectrum racer *TransAM*, the combative driving clearly went on to influence such games as *Rock N' Roll Racing*.

SOLAR JETMAN

■ Another Rare title that touched on its Ultimate heritage, this was mainly the work of Ste and Jon Pickford. Combining *Thrust*-style combat with some unwelcome spacewalking interludes, this is an ambitious and polished game somewhat marred by its crushing difficulty.



got,'" says Andy. I spied a really nice Porsche Speedster in one and a Lamborghini next to it. Yeah, that gets your attention. The lunches were great but you know they were family-orientated. Chris was and still is a wizard, a complete magician, but didn't think he was. Tim understood design, Carol had very good business sense and their dad made sure their feet kept in contact with the ground. They weren't up their own arses in any way. "

After many nervous waits for approval from Nintendo, *Digger T. Rock* was cleared for release in 1990 through Milton Bradley. Andy acknowledged it was a tough game and along with a generous allocation of lives, he kindly included some handy cheats, triggered in an ingenious manner. "I was once a sparky in the merchant navy so on the copyright page, if you tap the A button to spell the letter 'X' in Morse code – a dash, two dots and a dash – you'll get infinite explosives. Spelling 'L' does it for lives, too!"

It's one of so many clever touches that make *Digger T. Rock* a pleasure to discover. Though it sold in its hundreds of thousands and was the best-selling title of Andy's career by far, earning him "a good five figure sum, thanks to a terrific royalty deal," it came out near the end of the NES's life and is probably less well remembered because of it. The sequel alluded to in the credits never materialised, something Andy would have rectified with hindsight. "It was an aspiration that both Rare and I had to do another *Digger* game but things were moving on at the time. I should have planned how to make it easier to move it to the next console. It was one of the last NES games – the wrong end of the console's life. To port it to the SNES would have been a massive effort. A better decision would have been thinking about where *Digger* could go next."

As it turned out, it was a case of Andy deciding where he needed to go next. Having spent the Eighties making games, the Nineties saw him move into the slot machine industry, where he stills works today. *Digger* became his swan song though thanks to the release of the *Rare Replay* compilation earlier this year, his plucky miner is back for an encore.

"I was surprised," he admits. "I had no idea it was happening until my lad Ben told me. I went on the internet and bloody hell, there it was! You get that warm feeling that you knew something about this stuff once. "

Before we leave Andy, we need to check one final thing. What does the 'T' stand for in Digger T. Rock? Could it be Tiberius, in tribute to Captain James T. Kirk, another man boldly going where others hadn't?

"I don't know," Andy laughs. Well, a Rock by any other name would still play as sweet. *

Thanks to Andy for his tales and Martyn for his help.



» [NES] Digger's tool of choice serves as both earth mover and an enemy basher.



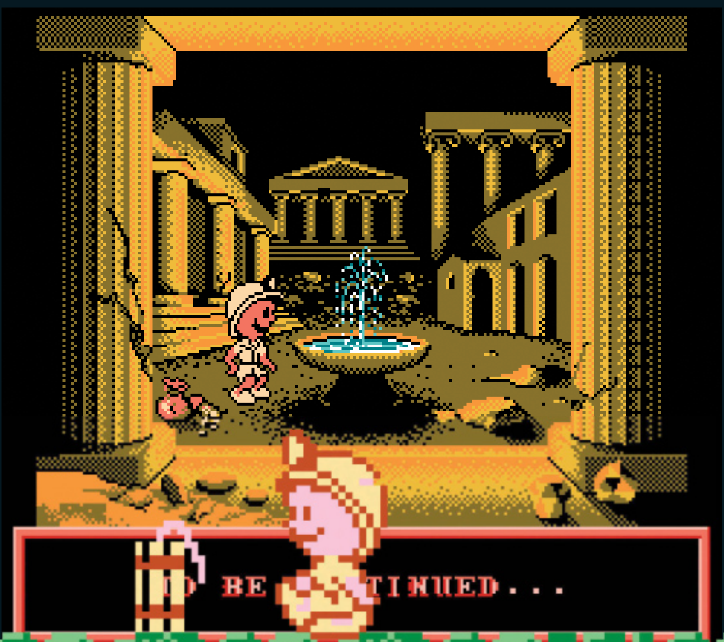
» [NES] Hitching a ride on a floating platform is handy but watch out for that skeleton…

» [NES] Like the Morlocks with more facial hair, the cavemen don't look too happy to be stranded underground.

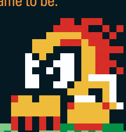
» [NES] Digger successfully locates the column which will open the exit, Sesame-style.

"The Stampers weren't up their own arses in any way"

Andy Walker



» [NES] The fountain of youth awaits Digger in the Lost City, though sadly a sequel never came to be.



THE DIGGING CREW

More underground adventurers

DIG DUG

■ A pumper as much as a digger, *Dig Dug*'s star inflated his foes to death.

LEMMING

■ Springsteen was born to run, Thunders was born to lose and this lemming was born to dig.

MR DRILLER

■ The Jamiroquai of videogaming, Mr Driller was born to go underground in daft headwear.

PITGUY

■ *The Pit's hero* took his parenting seriously and taught Digger all he knew about subterranean theft.

REPTON

■ Another earth-mover with a weakness for gems, Repton used his brain to excellent effect.

ROCKFORD

■ Rockford's soul-tinged brand of pop rock was a big hit in the Eighties. Hang on, that was Roachford. Sorry.

SPACE PANIC

■ The daddy of diggers, the hero of *Space Panic* did much of the spadework for the genre.

YESOD MOLE

■ If digging your own hole seems hard work, follow *Nodes Of Yesod*'s lead and enslave a mole instead.

ROBBY

■ Robby Roto just wanted to turn frowns upside down by rescuing trapped souls.


46:70 56:12
TIME 25:84
36:12 47:72
TIME 27:34



Kikstart 2

ACCELERATE. WHEELIE. JUMP. BROKEN LEG.

» RETROREVIVAL

» COMMODORE 64 » MR CHIP SOFTWARE » 1987

Given that Retro Gamer shares an office with GamesTM, X-ONE and Play, it's no surprise that lunchtime gaming is a popular activity here. In recent times, *Sensible Soccer*, *Mortal Kombat X* and *Rocket League* have all been obsessions, but there's one particular colleague that keeps going back to the *Trials* series – and I can't blame him at all, because I had the same experience with *Kikstart 2* as a kid.

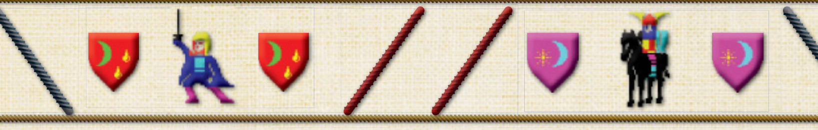
It's easy to forget how ridiculously tricky *Kikstart 2* actually is – successfully navigating any course requires you to know the correct approach for each obstacle, be it a wheelie, a jump, high speed or low speed. Of course, any fall moves you straight past the obstacle that thwarted you and incurs a time penalty, which makes it even harder to learn. However, once you've got the hang of it you'll find yourself blazing through the courses.

Of course, racing the CPU will only keep you going for so long, and it fell to other features to keep me amused over the long term. Thankfully, the two-player mode was able to keep things going for a while, as healthy competition is always welcome. But what really kept the game going for me was the excellent track designer – and these days, I do get the urge to use it to put together a devilish challenge for my *Trials*-loving colleague. I might have to practice for a bit before I challenge him to a race though, because I've become rather rusty…*



The Chronicles of Midnight

Many gamers first encountered Luxor the Moonprince standing at the Tower Of The Moon, while sitting at their computers, amazed at the seemingly open world stretching out before them. Martyn Carroll charts the history of The Lords Of Midnight series, talking to those involved and reflecting on the brilliance of its creator, the late Mike Singleton





» Mike Singleton, creator of the *Midnight* trilogy, who sadly passed away in 2012.

Who are the Lords Of Midnight? That was the question posed to readers of the March 1984 issue of *Computer & Video Games* magazine. Besides the question, the black-and-white teaser advert featured nothing but an image of a company of riders on horseback. It was sombre yet striking.

The ad was updated over later issues. "The first Spectrum game to feature landscaping!" was added in April. Landscaping? Were those horses pulling ploughs? "Not an adventure," explained the ad in May. "The world's first EPIC game with 32,000 possible panoramic views." The excitement peaked. Just who was making these claims? That question was easier to answer. *C&VG* included an index of advertisers at the back of the mag and the ads were booked by one Beyond Software.

Beyond was a fledgling software house established by *C&VG* publisher EMAP and headed up by the magazine's launch editor Terry Pratt. It had published several titles on various formats without a huge degree of success and *The Lords Of Midnight* was intended to change that. The job of developing a hit, flagship game fell to Mike Singleton, a teacher-turned-programmer from Merseyside. Mike was another person who would be familiar to *C&VG* readers as a number of his games had been published in the mag as type-ins and Terry was quick to get him on-board at Beyond. "Mike and I bounced ideas off each other a lot while I was editing *C&VG* and he was putting projects together for the magazine. When we determined to launch Beyond, Mike was my go-to guy as he was original and incredibly creative. *The Lords Of Midnight* was pretty well-formed in Mike's head as he had all the programming and maths logic already in place."

Mike began by implementing the 'landscaping' technique as a proof of concept. He had seen *The Hobbit* adventure game and was amazed at how long it took to 'draw' the location graphics on screen. His system was able to display an individual scene – featuring mountains, forests, ▶





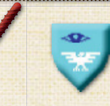
» [ZX Spectrum] Magical items can be discovered, like the Cup Of Dreams.



» [ZX Spectrum] The Ice Fear is cold as Morkin approaches the Tower Of Doom.














Tolkien Liberties

Games that plundered the fantasy world of Middle Earth

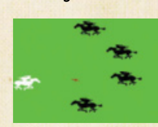
AKALABETH 1979

■ Richard Garriott's first game was initially self-published for the Apple II and served as the foundation for the *Ultima* series. Strongly inspired by Tolkien, the name of the game is derived from Akallabeth, one of the stories that makes up *The Silmarillion*.



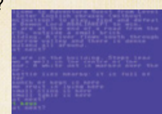
SHADOWFAX 1982

■ Originally developed for the VIC-20 (pictured), this effort from Mike Singleton was his first to lean on Tolkien. Playing as Gandalf you rode into battle against the Black Riders. The animation of the horses was great, although the game itself was simple.



ADVENTURE QUEST 1983

■ This was the second of Level 9's *Middle Earth* trilogy, so called as the adventures took place in Tolkien's world. In this one your quest was to find and defeat a dark lord. Sound familiar? The games were later re-released as the *Jewels Of Darkness* trilogy.



MORIA 1983

■ The underworld of Moria was brought to life on the Spectrum and Oric as a dull grid filled with ASCII characters. The game was about as appealing as that sounds. Every so often you'd find some treasure or awaken a beastie.



BORED OF THE RINGS 1985

■ Taking its name from the parody novel, this adventure was far more enjoyable that the official *LOTR* game from Melbourne House. Its waggish author Fergus McNeill would follow this up with a prequel, *The Boggit*, and later *Kingdom O' Magic* for the PC.



buildings and other features – in a finger snap. Clever programming meant that each location occupied just two bits of memory, so he could include not just hundreds but *thousands* of different locations – almost 4,000 in fact. And in each location the player could turn in eight compass points, resulting in the extraordinary 32,000 views claim. What's more it was possible to take control of up to 32 characters and move them in turn. Landscaping enabled Mike to create vast lands filled with wonderful vistas and cram them all into the Spectrum's meagre 48K memory.

With the technique proven, Mike was commissioned to produce the game for Beyond. Terry travelled up to the Wirral to meet Mike and they spent many hours discussing the game over pints in the pub. "Mike was thoroughly good company," says Terry. "From memory the talks seemed vital to the process but I suspect were mainly me buying beer, Mike expounding his ideas and both of us feeling better as a result." During his landscaping tests Mike noted that the colours blue and white worked well together on the Spectrum and this prompted the creation of a snow-covered world beneath a clear winter sky. A detailed backstory was then written to fit the setting. Mike was strongly inspired by Tolkien and his narrative featured warring factions and daring acts of heroism. The requisite menace was Doomdark, an evil sorcerer who had inflicted perpetual winter on the once pleasant land of Midnight. Aiming to defeat Doomdark once and for all were the Lords Of The Free, led by Prince Luxor and his son Morkin.

> "MIKE WAS MY GO-TO GUY AS HE WAS STUNNINGLY ORIGINAL AND INCREDIBLY CREATIVE"
> Terry Pratt

Mike expanded this premise into a five-chapter story which was bundled with the game. He also wrote the playing guide which detailed the game's mechanics while simultaneously optimising his code to make it fit into memory without sacrificing any key features. The title was due to launch in May but Mike spent seven months working on the game and it eventually arrived in late-summer. "Mike was late getting games to the plate," says Terry. "The *Lords Of Midnight* was a long time finessing and launched a lot later than planned.



» [ZX Spectrum] "Night has fallen and the foul are abroad!" It's perhaps wise to rest till dawn.



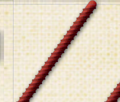
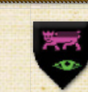










The Eye Re-Opens How Mike planned to bring the series to a close

When Mike returned to *The Eye Of The Moon* in 2011 he created a design document for the game featuring a new backstory. Instead of setting the game in the Blood March as originally planned, the focus was to be Valahar, a mountainous region lying west of Midnight.

"There was very little from the *The Eye Of The Moon* in the concept document," explains collaborator Chris Wild. "The main reason for this is that much of it had been used in *The Citadel*. So Mike created a new story in order to allow a new game to be created. Pretty much all of the ideas for the new instalment came from him. By the time he first spoke to me, it was fully-formed in his head and he had most of the novella planned out.

The document includes pages of the novella and an outline of the story, revealing how a new threat is plotting to resurrect Doomdark, Shareth and Boroth. Mike wrote: "The idea is to make this last game of the series a grand finale, with new landscape and gameplay features, new enemies and new friends, but also the potential of Midnight being assaulted by all its enemies too. And at the same time the land of Midnight returns firmly to the gameplay, which is fitting for the end of the saga, not to mention satisfying for old fans." You can view the document at bit.ly/EyeMoon.

» Here's Mike's rough map of Valahar, which was to be one of the main locations in *The Eye Of The Moon.*

» Mike wrote his stories by hand. Here's a previously unseen excerpt from *The Eye Of The Moon* story.

He wasn't deliberately striving for perfection ahead of commercial principles. We both had a lot to lose – Beyond was a new company and Mike was incentivised by royalties, so we were both trusting each other. However, most programmers are optimists. Mike believed it would come together faster than it did and in the end it was later than we hoped. It was a success but I suspect now that it would have been more of an instant phenomenon had it happened to plan. We were learning in an emerging industry where the recipe was still far from clear."

The Lords Of Midnight was a hit when it debuted, peaking at second place on the Spectrum sales chart in September 1984. Beyond's marketing had built up the hype and the reviews justified it – and not just in EMAP-published titles. It was a 'Smash' in *Crash* while *Personal Computer Games* awarded it 10/10, calling it "*The* game for the Spectrum." Beyond believed it would be a defining title on other platforms too and farmed out conversions for the C64 and Amstrad CPC.

The C64 version was handed to Incentive Software and programmed by 'Tag and The Kid', otherwise known as Anthony Taglione and Malcolm Hellon. "Tag and I went up to see Mike," recalls Malcolm. "After chatting to him over a couple of days and agreeing what we all wanted, we went back to Reading to start the C64 conversion. We added some embellishments – a wider panorama to suit the C64 screen and a moving Moon and Sun done using hardware sprites. It took us about three months and was successful. I recall that Beyond was impressed with the sales."

The CPC version was a straight port of the Spectrum original programmed by Rick Brown. Mike didn't handle the conversions, despite having coded for various processors in the past, as he was working on the follow-up to *Lords*. The original game's manual had promised a *Midnight* trilogy, you see.

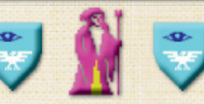
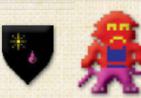
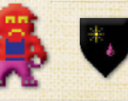
With the landscaping system a proven success it should have been quick and easy to create new adventures. That was the expectation anyway. Previews for the original game mentioned that the follow-ups – *Doomdark's Revenge* and *The Eye Of The Moon* – would both be out in the autumn of 1984! Beyond certainly believed that to be the plan. "I expected we'd get a trilogy ▶



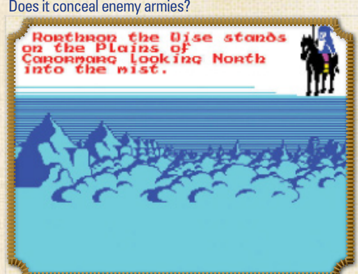
» [Amstrad] The well-received CPC version was published by Amsoft back in 1985.



» [C64] Tag and the Kid's Commodore version introduced a rising and setting sun.



» [ZX Spectrum] A strange mist sweeps the landscape. Does it conceal enemy armies?



» [ZX Spectrum] The follow-up featured better graphical shading to give everything more depth.

▶ out a lot faster than we did," says Terry Pratt. "I probably thought of it in terms of two more trips to the Wirral."

Mike had other plans. Doomdark's *Revenge* utilised the same 'look and move' control scheme of the original, but the scenery graphics were redone and new geographical elements were added including temples, palaces and cities. The map was almost 60 per cent bigger with a total of 6,144 locations and it was possible to command up to 128 characters, each of whom now had traits which affected whether you could recruit them. And you had to find them first – characters now moved around the map rather than waiting to be recruited like before. Despite all these new elements Mike still only had 48K of headroom so his code had to be rationalised to make it fit. A new backstory was written, revealing how Midnight thaws following Doomdark's death. However, in the Icemark, a desolate land to the north of Midnight, Doomdark's daughter Shareth lures Luxor to war by capturing Morkin.

The game arrived in the winter, after six months of work, to critical acclaim. Reviews acknowledged that the game was more difficult than its predecessor, due to the random nature of the AI. Speaking to us in 2004, Mike admits that the AI was a divisive addition: "With hindsight, the way the characters in *Doomdark's Revenge* made and broke alliances of their own accord, and moved about the map on their own quests, made things too unpredictable for the sort of strategic planning a player could do in *Lords*. Perhaps some better feedback to the player on what was actually going on in the background would have made this feature really work. At the time of release, though, I was convinced that it was a improvement over the original."

> "At the time of release I was convinced that the sequel was a significant improvement over the original"
> Mike Singleton

The sequel sold well and it's reported that sales of both titles topped 200,000. Contributing to this figure were the multi-format releases for the C64 and CPC. The C64 version was developed by Stewart Peart who was ideal, having developed games for the Spectrum and C64. "I got the Spectrum source listing and set out to understand how it worked," he says. "I had a few calls with Mike to clarify some of the clever bits and he was very helpful. In particular the way that he stored the map and character states in a small table was clever. I had children and a day job so I used to work from nine at night to two in the morning. I knew the game at the time and regarded it as a classic."

By the time Stuart's conversion arrived in summer 1986, Spectrum owners should have already witnessed the concluding chapter in the saga, *The Eye of the Moon*. A preview in *Computer Gamer* magazine revealed a September 1985 release date, yet various factors resulted in the game being delayed over and over before disappearing entirely. The key contributor was the sale of Beyond to Telecomsoft in late-1985 and a change in the *Eye* contract which didn't work out in Mike's favour.

Mike revealed to us in 2011 that he did start work on the third game and his plans were more ambitious than ever. "*The Eye Of The Moon* was partly in development following *Doomdark's Revenge*," he said. "It was to have an even bigger map – 128-by-128 locations – and I planned for the complete game to feature 12 different kingdoms, with a subgame to win in each one. I'd also done quite a lot of work on new graphics, which would introduce more variety, so that, for example, each castle would look different to the other castles, allowing you to recognise a place by sight. I had also been working on introducing

Defenders Of The Free

The key characters who help defeat Doomdark in The Lords Of Midnight

LUXOR THE MOONPRINCE

■ Luxor leads the Free against Doomdark, using his ring to command Lords allied to him. To succeed he must approach and destroy the Citadel Of Ushgarak.



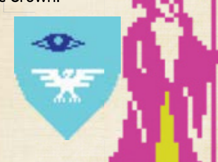
MORKIN

■ Luxor's son is part Free, part Fey. His quest is to stealthily travel north to the Tower Of Doom and locate the Ice Crown, Doomdark's source of power. This results in a quick victory.



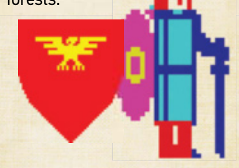
RORTHRON THE WISE

■ Rorthron is one of Luxor's key allies, providing the prince with sound guidance. In the War Of The Solstice he proves to be an excellent guardian for Morkin on his quest for the Ice Crown.



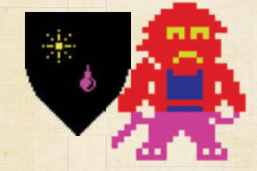
CORLETH THE FEY

■ Another close companion of Luxor, Corleth can recruit his fellow Fey lords in the battle against the evil Doomdark. As a Fey he has a clear advantage when travelling and fighting in forests.



FAWKRIN THE SKULKRIN

■ This devious critter aligns himself to Luxor in the game's novella. While other Skulkrin stand in your way, Fawkin can be recruited and is able to destroy the Ice Crown once it's claimed.

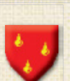


FARFLAME THE DRAGON LORD

■ Not a man riding a dragon but the dragon itself. Once found in the Mountains Of Dodrak, Farflame proves to be a powerful ally. He is swift and strong and can destroy the Ice Crown.





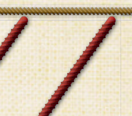















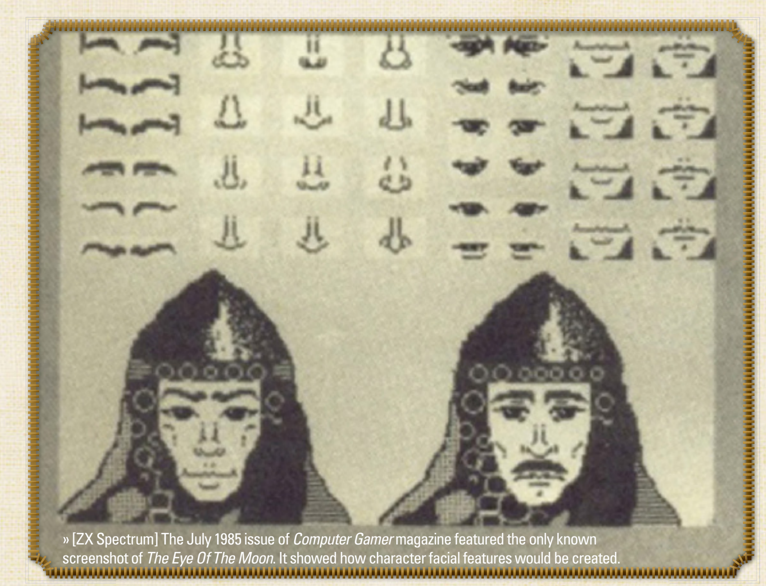

colour into the landscape itself." Mike called this system 'Randscaping'. "I had the prototype Randscape graphics running and working. That is about as far as it went."

Having parted with Beyond Mike set up Maelstrom Games and busied himself with other projects over the next few years including *Dark Sceptre* and *Midwinter.* Midnight was out of sight but not out of mind.

A decade on from the release of *Doomdark's Revenge* Mike finally returned to Midnight. *The Lords Of Midnight III: The Citadel* was developed for the PC and published by Domark. Mike revealed the impetus behind *The Citadel* in a foreword to the game's manual: "I had always planned to write part III of the saga, but changes of publisher, demand for other projects, and new technology conspired against this for many years. Finally, with the advent of 32-bit processing power on the PC, the time seemed ripe for part III. Now we could make the landscape more real than ever, we could have real-time 3D action, we could deepen the personalities and relationships of the characters, we could have full sound and music. It was irresistible."

As Mike states, the third game was a radical update featuring real-time movement and 3D graphics. While he makes it sound like the PC tech of the era was a perfect fit for his vision, the development proved to be difficult and drawn out. Mike worked on the game with six other Maelstrom programmers including Jim Shaw. "I joined Maelstrom in January 1994 and a few months later *The Citadel*'s main programmer David Ollman left the company and I was given the job of finishing it off," recalls Jim. "This was daunting as I'd only been coding games for six months or so! When I took over the graphics engine was largely complete. There wasn't much game and we were up against our deadlines with Domark already, so Mike and I set about filling in the gameplay. I added dragons and boats, all the citadels, character traits, magical items and battle logic. Mike rewrote the character routing algorithms so they worked and also designed the state machine which motivated the characters. I fixed thousands of bugs and heaved the game over the line with Mike. In the end the game was available in Virgin Megastores and we were still working on it – we'd not been told it had been mastered! I went with Mike to Liverpool to buy a copy. Even with the stress and long hours it was a great game to work on. I think it's a good game, but possibly too different from the Spectrum games."

Richard Hewison helped test the game and remembers the difficulties of ironing out all ▶



» [ZX Spectrum] The July 1985 issue of *Computer Gamer* magazine featured the only known screenshot of *The Eye Of The Moon*. It showed how character facial features would be created.

THE UTARG OF UTARG

■ Located at the Keep Of Utarg, this warrior is the sole Targ character in the entire game. He commands an army of 1,000 riders and proves to be a valuable addition to Luxor's war party.











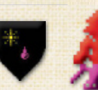
» A map of Midnight featured on the back of the game box. More detailed maps would later appear in magazines.

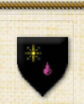














▶ the issues. "I was a big fan of the first two games and was determined that if I felt something wasn't right with the look, feel or behaviour of the game then I'd be very up front about it," he says. "Mike would often phone me up and go through my latest report. I was often questioning the general tactics used by the AI routines and this is when our chats would sometimes become a little heated. I think it's probably fair to say that Maelstrom was under a fair amount of pressure to deliver the game and I think that was possibly getting to Mike a little at that stage. I could tell he was passionate about the game and how it should play, but I suspect he was concerned that the game didn't slip again as I think it was already almost a year overdue when I got involved in early 1995."

Even with the delays Mike believed the game would have benefited from more development time. "I wasn't completely satisfied with it but I wasn't totally unhappy with it either," he told us previously. "Another six months work on it could have made it a lot better but at the time that wasn't feasible."



» [PC] The return of familiar characters helped boost the appeal of the third game.



» [PC] In-game maps made an appearance for the first time in *Citadel*.

"THE CITADEL WAS AVAILABLE IN VIRGIN MEGASTORES AND WE WERE STILL WORKING ON IT – WE'D NOT BEEN TOLD IT HAD BEEN MASTERED!"

Jim Shaw

The Citadel was set in the Blood March, the same warm lands where *The Eye Of The Moon* was supposed to take place. The search for the 'Eye', the mystical jewel of the title, also figures in the backstory to *The Citadel* as it's the reason why Luxor quests south before he is captured by the corrupt Boroth The Wolfheart. But according to Mike *The Citadel* was never intended to be the final chapter, but rather an instalment prior to the true conclusion that would always be *The Eye Of The Moon*.

The Eye lay dormant until 2011 when Mike began working on an update of the original game for phones and tablets. For this he collaborated with Chris Wild, a developer with a long association with the series having ported the first two games to the PC in the early-Nineties (these versions were included with *The Citadel*). As the pair discussed how best to update Lords for touchscreen devices Mike revealed that he'd returned to *The Eye Of The Moon*. Chris says: "I was thrilled when Mike dropped the bombshell that he had written some new material for the game, and that he thought it was ready for development. It suddenly changed the work that we were doing on *Lords* from being a remake to being a reawakening of the instalment, and a possible test bed of some of the technology that we would use to finally bring the lost chapter to the world. That the game might finally get developed and that Mike had entrusted me to collaborate with him on it, not just at a technological level, but at a story and design one too, was the thing of dreams. It felt like I was completing my apprenticeship."

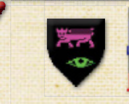
Shortly after they began working together Mike was diagnosed with cancer. They continued developing the game but progress was understandably slow. Mike passed away in October 2012. He was 61.

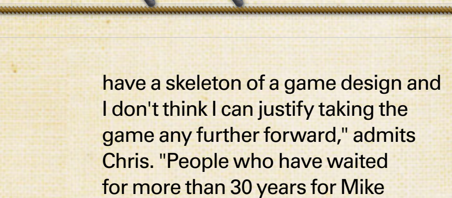
"As Mike wasn't able to transcribe all his ideas and story to paper, it means that we only really



» [PC] Chris Wild's Windows update of *Lords* led to the release of *The Midnight Engine* which allowed custom scenarios to be created.





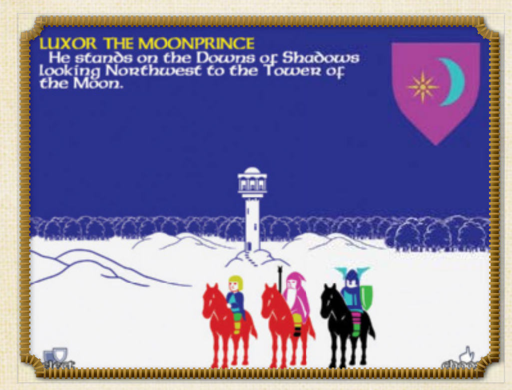


have a skeleton of a game design and I don't think I can justify taking the game any further forward," admits Chris. "People who have waited for more than 30 years for Mike Singleton's *The Eye Of The Moon* don't really want to play Chris Wild's interpretation of [it]."

Chris decided to release their new version of *Lords* featuring the original's graphics and this was followed by an equally faithful version of *Doomdark's Revenge.* The games are now available on multiple modern devices and both serve as a fitting tribute to Mike. *The Eye Of The Moon* is no more but Chris has a long term goal of re-imagining *The Citadel* as a 2D, turn-based game. "I really want to develop *The Citadel* in the same style as the original two games. I like the idea that the much-maligned third instalment might get a better appreciated outing. I've done some work on the map, more as a musing than as a project. I'm not precious about it and would be happy to collaborate with others to make it happen."

The prospect of more *Midnight* is tantalising, particularly if it aligns *The Citadel* with the first two games. It's a project Mike would approve of as he was supportive and appreciative of the *Midnight* community and the various projects that stemmed from the world he created. "I feel very flattered, although it's the games themselves which are the real focus of interest," he said. "It's great to know that something I've done has brought so much enjoyment and inspiration to so many people." *

Thanks to Chris Wild and Richard Hewison for their help.



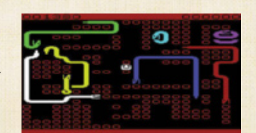
» [iOS] Faithful recreations of the first two games are available for various devices – see bit.ly/1RKeeic. Both are highly recommended.

» Chris Wild has recently revised *The Citadel* novella featuring illustrations by Jure Rogelj. Will an update of the game itself follow?

The Hits Of Mike Singleton

More great games from Mister Midnight

SNAKE PIT 1983



■ The best of Mike's early games for Postern. Originally for the VIC-20 and later ported to the Commodore 64, Spectrum and others, you had to gobble up the dots while avoiding a nest of snakes. It was only the snakes' mouths you had to avoid so their writhing bodies became the walls of a moving maze.

TREACHERY 1984



■ This was a special *C&VG* type-in where the game board, playing pieces and keyboard overlay appeared in the mag alongside the listing itself. It was an involving spy caper for the Spectrum that proved so popular that versions for the Commodore 64 and BBC Micro later appeared.

QUAKE MINUS ONE 1986



■ Mike worked with his friend Warren Foulkes on this C64 title shortly after the release of *Doomdark's Revenge*. It looked nice but was rather inaccessible – a trait that plagued Mike's later games. It didn't help that the instructions were vague, so only the most persistent players would get anything out of it.

DARK SCEPTRE 1987



■ This fantasy game, based on one of Mike's play-by-mail titles, was a long time coming but was worth the wait. It featured massive graphics and utilised a masking technique to reduce colour clash on the Spectrum. The game itself was occasionally buggy, sometimes baffling but often brilliant.

STAR TREK: THE REBEL UNIVERSE 1987



■ Probably Mike's most troubled project, this strategy adventure game suffered multiple delays before materialising on the Atari ST – PC and C64 ports followed. Despite the problems the end result was surprisingly coherent and provided Trekkies with a long term challenge.

WAR IN MIDDLE EARTH 1988

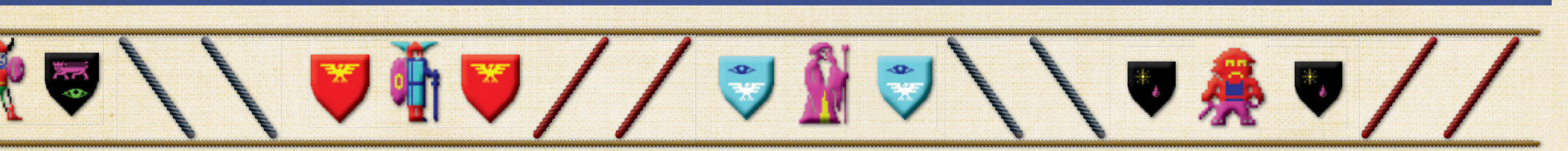


■ The *Lords* games were clearly Tolkienesque so it was fitting that Mike should work on an official *Middle Earth* game. Fans of *Doomdark's Revenge* would recognise elements but the game was strategy-lite due to the plot following that of the book. More casual warmongers would still find a lot to like here.

MIDWINTER 1989



■ Midwinter sits alongside *The Lords of Midnight* as Mike's other masterpiece. Like *Lords* it was impossible to categorise, being an elegant mix of action, adventure, role-playing, strategy, espionage and exploration. It was the first of Mike's designs to really profit from the move to 16-bit machines.



GUNSTAR HEROES



Combining technical wizardry, innovative design and non-stop action, Treasure's debut action game was explosive both on and off the screen. Grab your favourite weapon and join Nick Thorpe for a look back at this Mega Drive classic

» [Mega Drive] Treasure's trademark sense of humour is shown off here, with grunts clinging to the train for dear life.

» [Mega Drive] Did you honestly think you'd see a board game section in a run-and-gun prior to *Gunstar Heroes*?

» [Mega Drive] See those floating bombs? You can grab them and throw them at enemies!

Someone must have told the chaps at Treasure that first impressions count, because there's rarely been a debut quite like that of *Gunstar Heroes*. The action-packed platform shoot-'em-up wowed critics back in 1993 and established its developer as one of the hottest prospects in the industry – but given Treasure's heritage, that should have been no surprise.

Treasure was formed in June 1992 by former employees of Konami, one of the most technically proficient developers of the era, and you can see the talent involved from their previous projects. Coders Mitsuru Yaida and Hideyuki Suginami both worked on *Contra III: The Alien Wars*, and the former had also worked on *Super Castlevania IV*. Artists Tetsuhiko Kikuchi and Hiroshi Iuchi, plus musician Norio Hanzawa had all worked on the arcade version of *Bucky O'Hare*, with Hanzawa having also worked on the arcade version of *The Simpsons*. Treasure president Masato Maegawa had also worked on *Bucky O'Hare*, but as the director of the impressive NES platformer.

They quickly set to work on a Mega Drive project by the name of *Lunatic Gunstar*, a run-and-gun platformer which aimed to "inspire a feeling of exhilaration through fun, reckless combat action," according to the proposal document. Our protagonists Red and Blue are out to stop the vicious dictator Colonel Red from gaining control of four gems, which act as the power source for Golden Silver, a robot which has the power to destroy the world. Essentially, it's a flimsy pretext for the two to blast their way through a series of stages, shooting loads of Empire grunts and Colonel Red's lieutenants (including the brainwashed older *Gunstar* brother, Green) on the way to stopping his evil plan.

While the name would change – first to *Blade Gunner*, then to the final name of *Gunstar Heroes* – the concepts outlined in the original proposal remained the same. The key wrinkle in the run-and-gun template came from the abilities given to the Gunstars themselves. Players could choose whether they were able to move and shoot at the same time, and each of the four weapon types could be mixed and matched for a total of 14 potential combinations. These produced effects such as short, powerful blasts, lightning-quick homing shots, and player-directed fireballs. The Gunstars also had access to physical attacks ▶



» [Mega Drive] The mine cart stage shows off the strengths of the Mega Drive's CPU, with fast scrolling and intense action.

PIXEL PERFECT

GREEN
GOLDEN SILVER
COLONEL RED
YELLOW

▶ including throws, dives and stylish sliding kicks.

So far, so standard – but what set *Gunstar Heroes* apart was the fact that it was packed with ideas from start to finish. None of the stages actually stick to a standard horizontally-scrolling run-and-gun template the whole way through. The game is filled with some excellent set-pieces such as a mine cart ride (complete with anti-gravity jumps), a vertical chase to catch an ascending airship, a stage viewed from a monitor in the enemy's control room and even a space shoot-'em-up level. Most memorably, one stage is mostly comprised of a series of mini challenges in the form of a quirky board game, delivering a different selection of rooms depending on how the dice fall.

Many of the game's big moments came during boss battles, which were as memorable as they were frequent – most of the game's seven stages have multiple boss battles. In particular, Black's board game stage has loads, from a boss that prohibits gun usage to a surprisingly tough tiny soldier. However, the game's most memorable battle is the epic confrontation against Seven Force, a shape-shifting robot with seven forms to defeat. The bosses weren't just incredible to fight, either – they were a perfect vehicle to show off Treasure's technical prowess.



» [Mega Drive] There's never a shortage of explosions on-screen in *Gunstar Heroes*, even with one player.

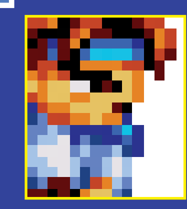


» [Mega Drive] Be sure to jump over enemy fire while you're sliding down this slope!

The fledgling developer had stated its desire to "create a fanfare by making full use of the Mega Drive's technical capabilities," and it's fair to say that on a technical level there wasn't a game on the platform that could match *Gunstar Heroes*. Regular scenes were exciting enough, with enormous explosions, loads of enemies and a frantic pace, but the bosses coaxed effects from the console that were thought to be impossible. Sprites were stretched and warped in a way that suggested that scaling and rotation had been cracked, while other bosses were enormous multi-sprite affairs that animated smoothly to convey a convincing 3D effect. The system might have been approaching its fifth birthday, but *Gunstar Heroes* didn't just teach an old dog a new trick – it taught it every trick in the book, and a few more for good measure.



» [Mega Drive] See those floating bombs? You can grab them and throw them at enemies!



Q&A YOSUKE OKUNARI

Sega's producer talks about reviving Gunstar Heroes for the Sega 3D Classics range

Why choose *Gunstar Heroes* to port to 3D?
The game was on the list back when we started the project in 2011, but it was deemed impossible at the time because of the lack of know-how. But now that we have three years of experience, and the fact that we were able to increase our development budget due to the high praise the series has received, we were finally able to solve all the original problems.

How long does a conversion typically take?
It depends on the title, but *Gunstar* took over a year. In the early days of these projects, most of our time was allocated to core groundwork, so not all that much time was allocated to the 3D work. However now, we don't really need to spend so much time on that groundwork, and can focus our efforts on the 3D itself. *Altered Beast* barely had even a month of work put into its 3D, but for this title, we spent easily ten times that much time on it.

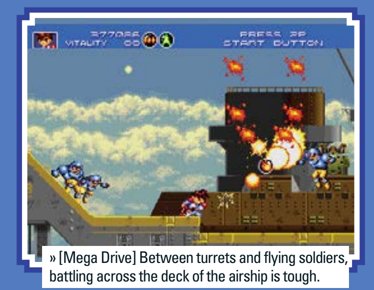
Why is it important to add so many emulation options?
As history shows, the best games have always been the newest ones, but the games that really stick with you are the ones that you played when you first started playing games. The same goes for movies or music, and we need an environment where you can have easy access to these works from the past. However, games are not a passive form of entertainment. So you have to approach them with the intention of allowing people to recall how it felt to play these games back when they were new. Whether that's through 3D, new content, difficulty adjustment, we approach this in a number of ways. Also, older games have a primitive sort of pleasure associated with them, and I think people should go back and play them over and over again, and it's important that people who have never played them have a chance to do so.

What benefits do you feel the 3D adds to the game?
While the game's original graphics are 2D, they are drawn in a 3D style, so by putting things into 3D, it makes the game's memorable bosses and their movements really stand out.

You always add extra gameplay modes to your ports. What was added for *Gunstar Heroes*?
The main addition this time around is Gunslinger Mode. One of the fun aspects of *Gunstar Heroes* is all the various weapon combinations, and how you choose weapons based on the situations. But you couldn't change to whatever you wanted, when you wanted, so some people would fall into a habit of just getting the combination they liked and sticking with it. So for the extra mode, you can now change your weapons whenever, and you might find that if you use a certain combination you never tried before, you can easily defeat that boss you used to have so much trouble with. It's a chance to discover the fun in the game that the developers originally intended.

What's the hardest thing you've encountered while porting *Gunstar Heroes* from a technical point of view?
Well, the way the stages look and feel completely changes from stage to stage, so the 3D conversion was really a monumental task. And this isn't something just anyone can do. This is the result of programmers with tons of experience, a skillful display of craftsmanship from a team dedicated to the work.


» [Mega Drive] They're tall, but these robotic legs have wimpy regular soldiers at the top.


» [Mega Drive] Between turrets and flying soldiers, battling across the deck of the airship is tough.

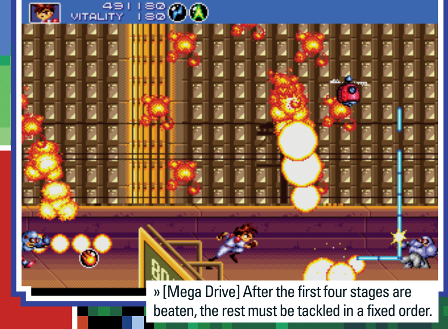
Gunstar Heroes arrived on the market in September 1993, and critical reception was overwhelmingly favourable. The game wasn't without its detractors – most notably *Edge*, which awarded the game 6/10 in its first issue, bemoaning the game's frequent boss fights, short length and lack of secrets. However, the likes of *Computer & Video Games*, *GamePro* and *Sega Magazine* gave the game scores of 90% or higher, a consensus shared by the majority of the press. In a 93% review for *Mean Machines Sega*, reviewer Radion Automatic declared the game "one of the most incredible games that I've ever seen on the Mega Drive."

Despite this critical acclaim, *Gunstar Heroes* wasn't an overwhelming commercial success – the game peaked at sixth in the UK Mega Drive charts upon launch, and quickly dropped out of the top ten. However, demand for the game has remained strong thanks to its high quality and Treasure's fan following, so you'll struggle to find a complete copy of the Mega Drive game for less than £40 today. However, the game is available for download on modern platforms at a fraction of the cost.

Between its early policy of not producing sequels and commercial performance that didn't match up to the critical success, Treasure declined to produce an immediate follow-up to *Gunstar Heroes*. The developer instead moved onto other projects, with the most similar being 1995's boss rush run-and-gun *Alien Soldier*. Sega had M2 produce a Game Gear conversion of *Gunstar Heroes* for the Japanese market, but didn't do much else with the game save for including it on the compilation cartridge *Classic Collection*, alongside *Flicky*, *Altered Beast* and *Alex Kidd In The Enchanted Castle*.

As a result, for about a decade Media Vision's PlayStation title Rapid Reload (known as *Gunner's Heaven* in Japan) was the closest thing players had to a sequel. It's an obvious homage to *Gunstar Heroes* which is polished and enjoyable, but lacks the inventiveness and technical mastery of Treasure's game. However, Treasure eventually ditched its no-sequel policy, leading to the production of a Game Boy Advance sequel titled *Gunstar Future Heroes* in 2005. The new game closely followed the themes and settings of the Mega Drive original, while including a variety of new elements (including brilliant sections that pay homage to *Flicky* and *After Burner*) and a more flexible combat system. The game was once again well-received critically, although less so than the original, but again experienced weak sales.

Despite the game's commercial struggles, *Gunstar Heroes* still generates a lot of fondness amongst gamers, as well it should. If you want to see a Mega Drive firing on all cylinders, love a good run-and-gun or just enjoy games that constantly throw surprises at you, *Gunstar Heroes* is a game that will leave you satisfied, and then some. ★


» [Mega Drive] After the first four stages are beaten, the rest must be tackled in a fixed order.

Q&A: MAC SENOUR

The gamerustlers.com owner and former Sega Of America producer recalls preparing Gunstar Heroes for the West



You've mentioned in previous interviews that other producers had rejected *Gunstar Heroes*, and that if you hadn't taken it the game wouldn't have released in the American market. Why did Sega's other producers pass on the game?
It was a matter of timing and market changes. At that time we were about to release a baseball game that had double sized characters. The developers of *Spider-Man* had discovered an feature in the Genesis that allowed for double height sprites, and that was the 'in' thing at the time. *Gunstar* had small characters and I'm sure they all felt that small characters were out and big was in. My boss at the time, Clyde Grossman, asked the exact same question. I remember answering that yes the characters were small, but there was a *lot* of frantic action with great animations.

What were the aspects that drew you to take it on?
That was the first, of many, what came to be known as 'throw down' games. I played it in my cubicle for less than five minutes and threw the controller on the ground. I stood up and loudly said: 'That's game of the year,' to which all my co-workers laughed.

How much interaction did you have with the developers at Treasure?
Oh, I sent over a few faxes. They didn't speak English so I didn't want to go into long details that someone may or may not translate. I know I made one change, there was a boss who looked a little a bit too much like Hitler. They removed the moustache.

It seems like the game struggled to find its image somewhat – it went through a couple of pieces of cover art and a few names prior to release. Was this particularly out of the ordinary?
Marketing made those calls, and although I was there I was not part of the decision making process. That would be Jaime Wojik who was just starting a long career in games. It was typical for all games to go through the marketing mill of creative and art. They were a good group who were in touch with the market as much as the game producers.

Did you feel vindicated by the game's strong critical reception? How did your colleagues react?
I signed the release papers for *Gunstar Heroes* the day I left Sega to work for Atari/Tengen. When I saw it had won two Game Of The Year awards I felt very proud. I felt even more proud when years later I walked into a classic game store and asked about a copy of *Gunstar*. They told me it was the best game ever made for the Genesis and the price, if they could find a copy, was far above the original sales price.

As far as my colleagues go, it was a little competitive there at Sega so they didn't react in a way that later they would be proud of. I heard things like: 'dumb luck' and 'Mac didn't do anything' etc.. I understand how they felt, I later turned down *Grand Theft Auto*. You enjoy the hits, don't get caught up in the misses. I was lucky to have worked with some great people.

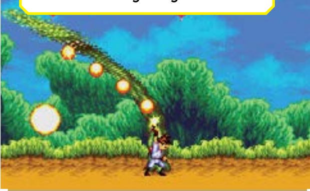

» [Mega Drive] As well as the named bosses, there are lots of mini-boss encounters in *Gunstar Heroes*.


» [Mega Drive] Sticking to the combination of chaser and lightning is efficient – but who plays for efficiency?

BOSS RUSH



Gunstar Heroes has almost as many bosses as it does explosions – and that's loads! Let's take a look at this fearsome arsenal…



PAPAYA DANCE

■ A simple early encounter – balloon bombs rain down from above, while slug-like creatures advance along the ground.

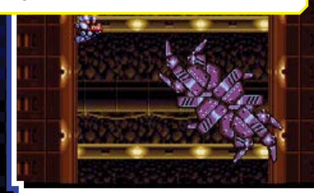


SEVEN FORCE – EAGLE FORCE

■ When it moves, its wings and tail create openings – time your movements to pass them, then stay low on the screen.

SEVEN FORCE – CRAB FORCE

■ A tough one to crack. Its barrier attacks require you to move frequently, and it fires devastating shots too.



SEVEN FORCE – URCHIN FORCE

■ This one's a test of agility – it starts off by spinning down the walls and progresses to firing multi-directional shots.



BRAVOO MAN

■ This enemy is made up of boxes, giving an awesome 3D effect. It performs some recognisable fighting game moves…



SEVEN FORCE – BLASTER FORCE

■ Despite the fact that this gun can rotate, it has blind spots. Exploit them and attack with impunity!



ORANGE

■ This meathead will charge you with lots of attacks, and the occasional projectile. Don't forget that you can hang on the wings!



SWAPPING REG

■ Dart between the legs of this jumping robot and don't linger underneath it – you'll get shot to pieces if you do.

PINKY ROADER

■ Pinky Roader's arm will move around to shoot you from different angles. Concentrate your fire on the main robot!



BLACK BEAT STEPPER

■ This slow-paced boss rolls the dice to determine where it's going, then fires depending on the colour it lands on.



SEVEN FORCE – TAILS FORCE

■ Seven Force's serpentine form will attempt to swipe you with its tail, which is easy to avoid.

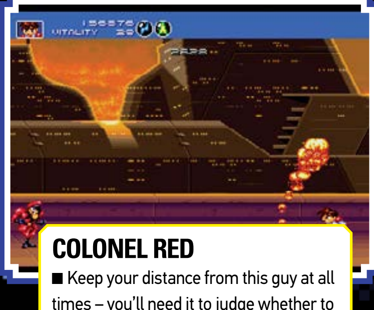
SEVEN FORCE – TIGER FORCE

■ This one's impressive to look at, but if you stick to the top rail it's easy – it telegraphs its ricochet shots.



SEVEN FORCE – SOLDIER FORCE

■ The versatile robot's running configuration throws boomerangs and launches its arm. Make sure you learn when it's about to launch the arm!



COLONEL RED

■ Keep your distance from this guy at all times – you'll need it to judge whether to stand or jump when he fires flame shots.



TIMERON
■ Don't shoot! You'll score bonus points depending on how long you wait to kill this boss, so hang in there.

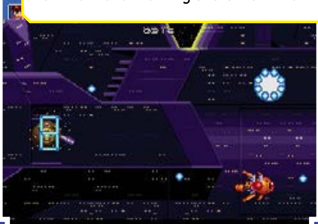
DUCK BATTALION
■ Watch out! It's hard to avoid the shots this boss fires, but the bigger danger comes from its physical charge attack.



ORANGE
■ The final encounter with this muscular military man is much like the first, but you don't have to worry about falling off the stage!



BLACK FLY
■ You'll need to use the left and right of the screen to avoid its windmill shots, but don't get scrolled off the top.



1000MM GUN
■ Between straight shots and eight-way fragmentation blasts, this one will keep you on the move. Homing shots work well here.



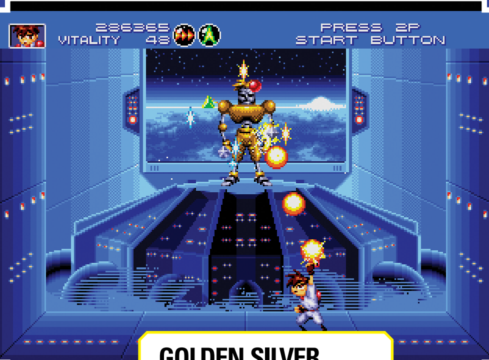
KAIN
■ Pink's henchman makes a valiant last stand here, but is easily dispatched with a few well-placed throws.



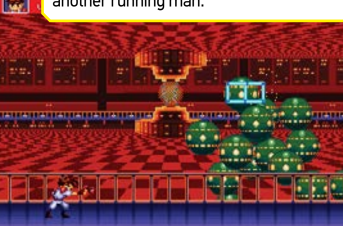
GREEN
■ The elder Gunstar brother will test all of your skills – he's agile and powerful. There's no safe place to hide!



SEVEN FORCE
■ Green's awesome robot is back, this time in space! It'll transform at will this time, and roam around the screen.



GOLDEN SILVER
■ This final boss is seemingly invincible, but you can knock it back momentarily. When you do, shoot the gems that power it.



CORE GUARD SYSTEM
■ This one has three forms – the first will try to hammer you, the second floats around and shoots at you, and the third is another running man.



PINK LOBSTER
■ When it's firing bubbles, you're safe. Make sure you avoid that claw when it moves, though!

CONVERSION CAPERS

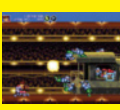
Gunstar Heroes found its way onto a host of systems

GAME GEAR 1994



■ You might think this 8-bit version is a tad ambitious, and you'd be right. The game is missing a full stage and has noticeable flicker and slowdown, but does contain exclusive content in the form of propeller-pack and mech sections.

PLAYSTATION 2 2006



■ This Japanese compilation offers both the Mega Drive and Game Gear versions of *Gunstar Heroes*, with options to turn off flicker and slowdown. In addition, there's loads of excellent bonus content to sink your teeth into.

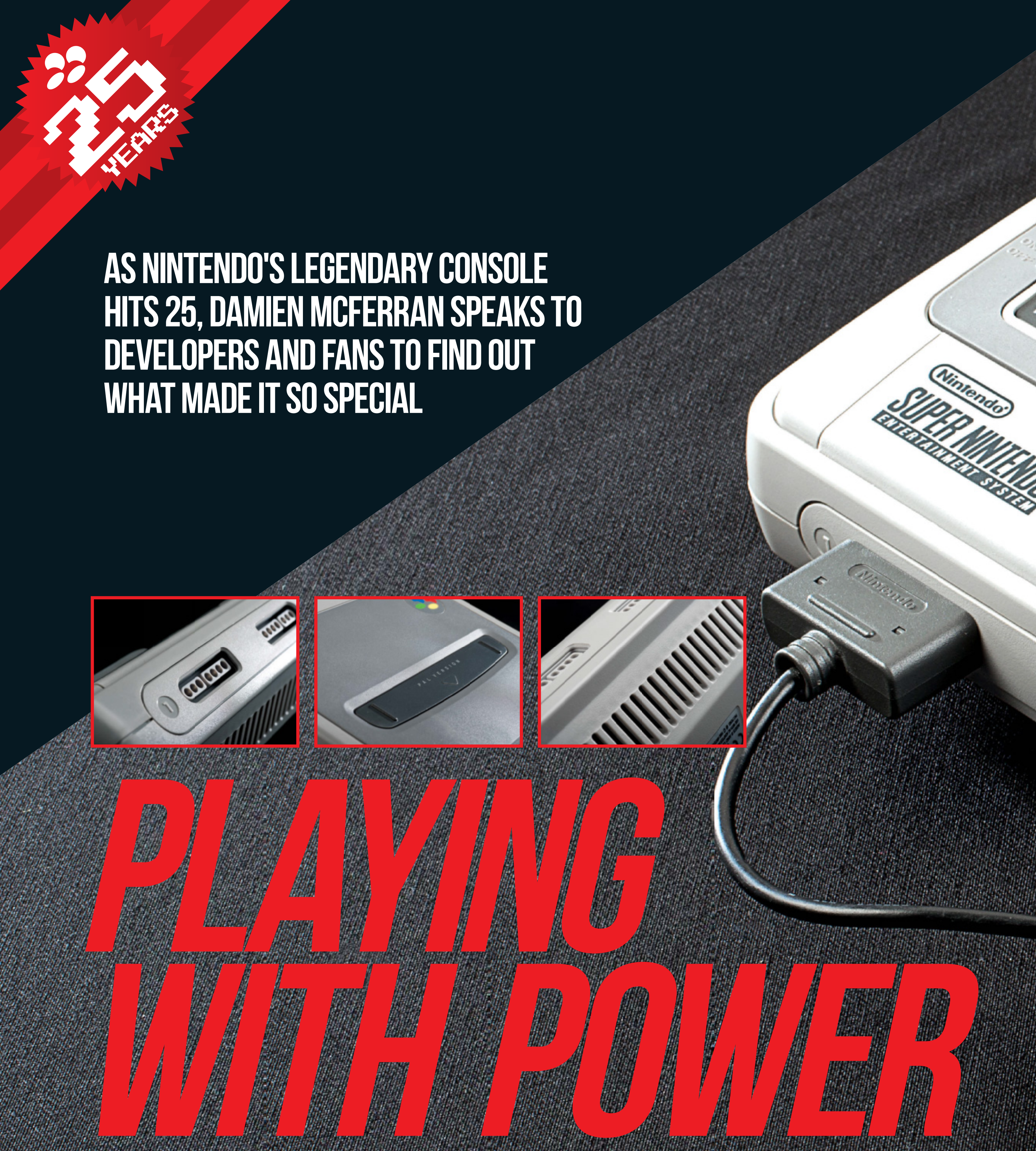
3DS 2015



■ As well as adding a 3D effect to the game, *3D Gunstar Heroes* offers the Gunslinger Mode, which gives players the chance to switch between weapons and firing modes on the fly. We gave it an excellent 9/10 when we reviewed it in issue 146.

AND THE REST…

■ Emulated versions of *Gunstar Heroes* are available for download on the Wii, Xbox 360 and PS3. PS3 owners might opt for the PS2 release, which can be downloaded with a Japanese account. The game is also available for PC, individually and as part of the *Sega Mega Drive Classic Collection*. The iOS version was withdrawn from sale in 2015.



AS NINTENDO'S LEGENDARY CONSOLE HITS 25, DAMIEN MCFERRAN SPEAKS TO DEVELOPERS AND FANS TO FIND OUT WHAT MADE IT SO SPECIAL

PLAYING WITH POWER

THE SUPER NINTENDO 25 YEARS ON



PLAYING WITH POWER

Many gaming systems have been branded iconic over the years, but that term seems almost inadequate to describe the Super Nintendo, a console which is perhaps the finest ever produced by industry veteran Nintendo. The Kyoto-based company's sophomore home system had the hardest of acts to follow; the NES – or Famicom as it was known in its native Japan – was a commercial success in North America and Japan, essentially granting its maker a monopoly on home console-based interactive entertainment. Post-NES, Nintendo's job was made harder by the fact that rival firms had upped their game and entered the market with powerful challengers, such as the NEC PC Engine and Sega Mega Drive, which launched in 1987 and 1988 respectively. By the time Nintendo was ready to officially announce its 16-bit console, the aging NES was losing audience share to these spritely new systems, and something drastic was required to put Nintendo back on top. Looking back now a quarter of a century later, it's impossible to deny that the SNES did just that, and much more besides. By the time Nintendo moved onto the N64, its 16-bit system was home not only to some of the finest games of the generation, but of all time – and they've endured in the years that have elapsed since then. ▶



DIFFERENT VERSIONS

The SNES had a number of forms…

SUPER FAMICOM

■ Sleek, playful and undeniably classy, the Super Famicom boasted a design which was far removed from the plain and boxy Famicom. The controllers were revolutionary and the four-colour logo has become a cult icon – Nintendo even resurrected the colours for its recent New Nintendo 3DS handheld. On the base of the console an expansion port exists which allows it to connect to the Japan-only Satellaview add-on. The PAL version (shown here) looks identical, but sports SNES branding.

SNES JR/ SNES MINI

■ Launched in 1997 – a time when most players had moved onto more powerful hardware – the SNES Jr was marketed as a cheap, entry-level proposition for younger players. Smaller in size and cheaper to produce, this revised system lacks RGB output as standard but can be modified to obtain it. The power LED and eject button – both hallmarks of the original design – are also absent, as is the expansion port on the bottom.

SNES (NORTH AMERICA)

■ For some unfathomable reason, Nintendo used a totally different case design for the SNES in North America. Designed by Nintendo Of America's Lance Barr, the boxy and unattractive system dropped the four-colour buttons in favour of a purple and pink pallette. The cartridges were also changed, with the US versions adopting the same squared-off design to match the console itself. Thankfully, the European model reverted to the Japanese design, but many misguided American fans swear their version looks best.


» The front of the SNES is elegant. It sports power, eject and reset buttons in front of the cartridge slot.

Back in the early-Nineties when the news came that a successor to the all-conquering NES was in the works, it wasn't just gamers the world over who were rubbing their hands with glee – developers who had made a living on Nintendo's 8-bit system were also keen to see if it could live up to the hype. "It was exciting to see the specs," recalls Chris Sutherland, a former Rare developer who is now working on *Yooka-Laylee* at Playtonic Games. "Previously I'd developed on Game Boy and many others at Rare had worked on NES, so this was a chance to develop games that had far fewer technical limitations." Fellow Rare alumni Brendan Gunn agrees. "It felt like a natural progression from the NES that I was already very familiar with. This made it very easy to get up to speed. The hardware features were far more advanced, but in ways that seemed like a very natural progression." Other developers simply couldn't believe what Nintendo was telling them. "I was given a preliminary outline of what the machine could do," remembers Nick Jones, the former Shiny Entertainment staffer responsible for the SNES versions of *Earthworm Jim* and *Alien 3*. "It seemed impossibly optimistic and with no hardware or full manual, it was hard to really make out what the machine could do. It was like somebody took every programming restriction I'd ever had and just moved the limits an order of magnitude ahead."

For Brendan and Chris, the SNES represented the next step in the evolution of the games console. "The level of restrictions on the NES and Game Boy had been raised, which is why SNES games tended to have larger characters," says Chris. "Back then, characters were typically built from a number of 8x8 sprites, and if you had more than a certain number of sprites in a row, you'd see parts of your sprite disappear." Compared to rival hardware of the time the SNES' gaming-focused internals allowed for some amazing experiences. "The SNES felt much easier to work with, but that may be because it was so much like an enhanced NES," says Brendan. "It helped that the hardware was designed very specifically with things like scrolling and parallaxing in mind, where the Amiga hardware was designed to be a more general purpose computer." Mike Dailly – who was employed at DMA Design when the SNES launched and worked on *Unirally* – feels that the system was head and shoulders above its competition. "It was better than the Amiga and PC by miles, and the hardware was better than the Mega Drive," he says. "There were just so many toys to play with. I preferred the SNES over everything else. I thought it was an amazingly cool machine."

> **"IT FELT LIKE A NATURAL PROGRESSION FROM THE NES THAT I WAS ALREADY VERY FAMILIAR WITH. THIS MADE IT VERY EASY TO GET UP TO SPEED"**
> Brendan Gunn

While Rare's staff was arguably in a privileged position, having gained valuable experience of Nintendo hardware via its wide selection of games on the NES and Game Boy, other developers had to muck in and learn the hard way. "I went from the C64 which had a 6502 processor straight to the SNES which had a 65816 processor," explains Nick. "They are almost identical except that the 65816 is 16-bit and the 6502 is 8-bit, so you'd think the transition would have been easy, but it wasn't. I was stuck in this mindset that I needed to optimise every byte. The hardware was a

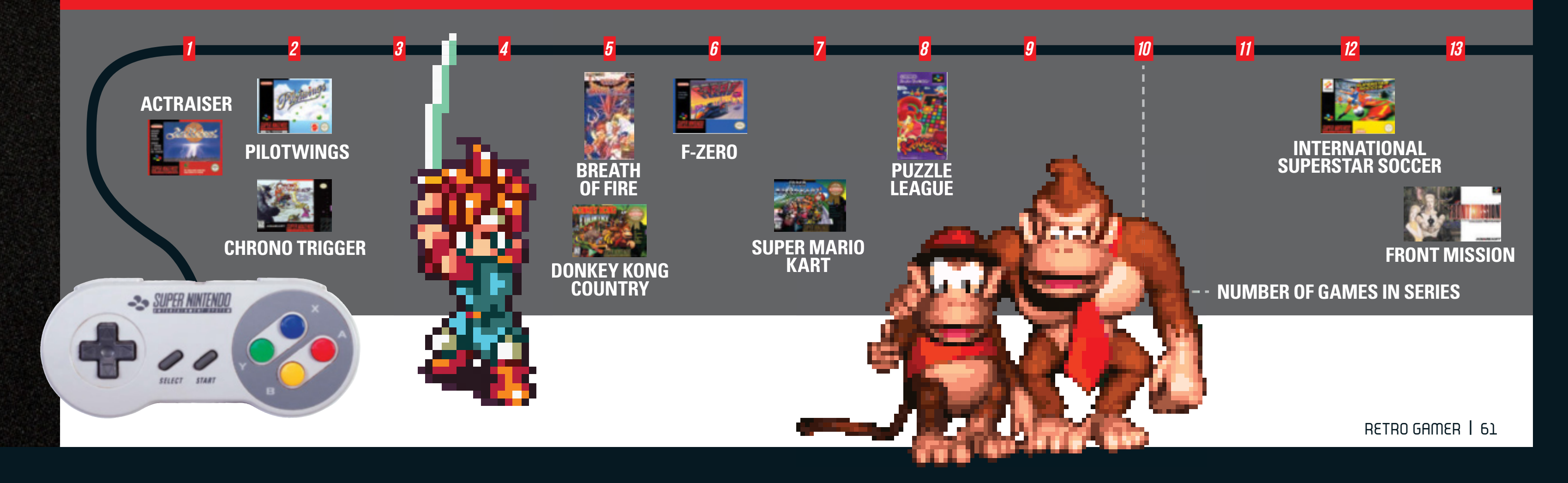
» [SNES] *Pilotwings* highlights what the SNES could achieve using Mode 7.


» [SNES] Many thought *Donkey Kong Country* was a next-gen game.


» [SNES] *Super Mario Kart* remains our favourite game in the series.

FRANCHISE STARTERS

Just some of the brilliant franchises that began on SNES

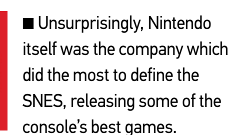


25 YEARS

STAR POWER

Ten legendary developers that made the SNES sing





■ Unsurprisingly, Nintendo itself was the company which did the most to define the SNES, releasing some of the console's best games.



■ The arcade conversion of *Street Fighter II* remains one of the most important SNES releases, and gave Nintendo a massive advantage over rival Sega.



SQUARESOFT

■ The undisputed master of the RPG, Square produced some of its finest work on the SNES, but sadly many of its titles remained exclusive to Japan.

KONAMI

■ Responsible for some amazing arcade and action games for the SNES, including *Super Castlevania IV, Axelay, Parodius* and *Turtles In Time*.



■ Titles like *NBA Jam* and the *Mortal Kombat* series made Acclaim a household name in the Nineties, and it scored many commercial hits on the SNES.

> **"MODE 7 MADE THE HEADLINES, BUT WAS OF LIMITED USE FOR THE KIND OF GAMES WE WANTED TO MAKE. THE OTHER FEATURES WERE FAR MORE EXCITING TO ME"**
> Brendan Gunn



» The SNES pad was surprisingly comfortable and a big improvement over the NES pad.

▶ lot more complex which took a little getting used to. The manual was written in English by what I assumed to be a Nintendo engineer who wasn't entirely fluent in English, so I had to be a flexible when reading how something worked. I still have my manuals and I prize them."

The SNES heralded a new era of trickery thanks to the inclusion of Mode 7, a graphical mode which allowed it to smoothly scale and rotate a single background layer. It was put to good use in titles like *F-Zero, Pilotwings, Super Mario Kart, Super Castlevania IV* and *ActRaiser*. While it was an impressive visual trick, its effectiveness was restricted outside of certain genres. "Mode 7 made all the headlines, but was of limited use for the kind of games we wanted to make," explains Brendan. "The other features were far more exciting to me. Multi-layered parallaxing and colour blending made for much richer backdrops, while bigger sprites gave us far greater capabilities for big, colourful characters," Chris agrees. "We actually stayed clear of Mode 7 for the most part because the ability to scale and rotate was so new and shiny, it felt like it was obligatory for games to use this mode. It also had limitations in its use that made us veer towards using the other modes with some tricks to appear to add more 'layers' of movement than the hardware supported."

The SNES was cutting-edge, but the market into which it was thrust was very different to the one the NES had dominated so effortlessly. Sega was no longer content with second place and thanks to savvy marketing and an earlier release it managed to secure a chunk of the North American and European markets with its Mega Drive system. What occurred next has become the stuff of legend, forever ingrained in the consciousness of the gamers who lived through it: the industry's first *real* console war. "It was interesting because this was a time when there was a difference between each platform," says Jonathan Town, a former Nintendo community manager and retro-gaming aficionado. "These days it doesn't matter too much whether you have a PC, PS4 or Xbox One as the majority of titles are the same and the differences are negligible. The SNES and Mega Drive had a charm to them and even the same game would be different depending on which console you had. Instead of arguments over frame-rates we had *Sonic* vs *Mario, Final Fight* vs *Streets Of Rage, Star Fox* vs *Silpheed*; each console had a clear personality."

Naturally, Nintendo's console was compared directly to Sega's hardware, and the respective strengths and weaknesses of the pair were highlighted in the magazines of the period. "They were both very comparable machines," says Nick Jones. "The Mega Drive had a faster processor, slightly bigger screen resolution and a synth chip for audio. The SNES had complex graphics modes, a higher range of colours, the video signal was a lot cleaner and it played audio samples for sound – which was a disadvantage and an advantage at the same time." While the SNES boasted superior capabilities, much was made of the console's slower CPU – a trade-off Nintendo made to ensure it cost less to manufacture. The weaker chip is often blamed for the lack of fast-paced shooters on the platform, but Chris Sutherland insists that it was rarely an issue from his perspective. "The speed issue wasn't something that we encountered too much with the *Donkey*



■ Virgin was a prolific publisher on both the Mega Drive and SNES, releasing titles like *Earthworm Jim*, *The Lion King* and *RoboCop Versus The Terminator*.



■ Before merging with Squaresoft, Enix was its rival and made the popular *Dragon Quest* franchise.



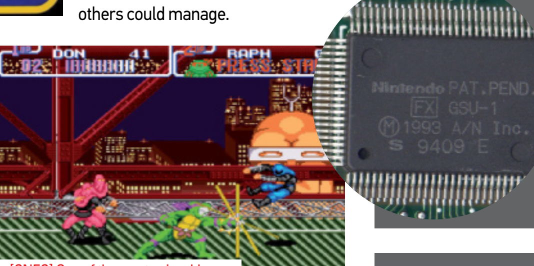
■ Once the home of programming Pickford siblings, this studio produced *Plok*, *Equinox*, *Ken Griffey Jr. Baseball* and more for the SNES.

SUNSOFT

■ Sunsoft's prolific work during the 16-bit era may not have yielded many solid gold classics but the company certainly pumped out quite a few SNES releases.



■ The creator of one of the SNES' most important titles – *Donkey Kong Country* – UK-based Rare mastered the hardware in a way few others could manage.



» [SNES] The *Earthworm Jim* franchise received two games on SNES.

» [SNES] One of the most enjoyable scrolling fighters you can play on SNES.

Kong Country series – perhaps because we were brought up on resource-starved consoles such as NES and Game Boy so we were always trying to be keep things optimised as we developed. Back then systems like that with specialised sprite video hardware that targeted video games could often outshine what was done on a standard PC."

Nick feels that the sluggish CPU was definitely a shortcoming, but like Chris, he was able to overcome this with some clever programming. "It was a little bit of a handicap for sure," he says. "The processor wasn't as powerful and it didn't have as many registers either. One advantage I had was that I came from a C64 background. The processor on that chip was even more restrictive and all games on that machine had to run at 50MHz so I learnt a lot of tricks to achieve that magical frame-rate. Even when I went to Shiny and we worked on *Earthworm Jim*, I didn't tell the Mega Drive programmers my 65816 tricks for over a year so that it evened the playing field. One of the other restrictions was the way that sprites were drawn onto the screen. The SNES was much more limited so you had to draw a lot more sprites to get the same graphic on a screen, which meant more processing power just to set the graphics up. I was able to disguise most of the difference in processor speed. If you play *Earthworm Jim* on the SNES and Mega Drive, the most obvious way to spot the speed difference is when starting a level. Because that was when the game was decompressing the level and graphics – a task limited by processing power. The levels would take about three times longer to decompress on the SNES."

Nintendo augmented the power of the console with additional chips which were packed into the cartridges, the most famous of which is the Super FX chip, used in *Star Fox*.

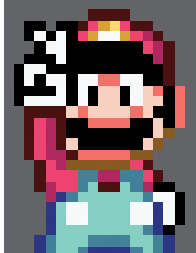
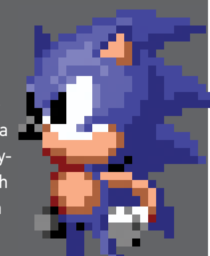
These days, it's often the case that developers require time to fully harness the power of a console, and as a result, the software you see at launch is but a taster of what's to come – by the end of a console's lifespan, ▶



» Handily, the AV lead for the SNES's output can also be used on a GameCube if you own one.

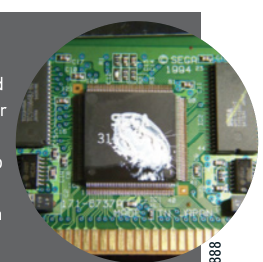
CONSOLE WARS

Scraps that defined an era

MARIO VS SONIC

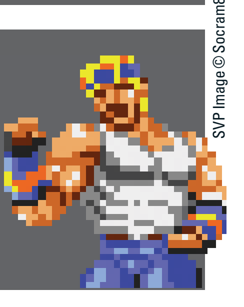
■ While the *Sonic* games arguably lacked the deep playability of *Super Mario*, the blue hedgehog was marketed perfectly and stole a lot of the Italian plumber's thunder in the early-Nineties. The simultaneous worldwide launch of *Sonic 2* was an event which eclipsed even Nintendo's amazing efforts.



SUPER FX VS SVP

■ As the SNES and Mega Drive grew older and the industry's focus on 3D gaming became ever more apparent, Nintendo decided to enlist the help of UK developer Argonaut to create a chip to bolster the console's polygon-pushing prowess. Sega countered with the Sega Virtua Processor (SVP for short).

SVP Image © Socram8888



FINAL FIGHT VS STREETS OF RAGE

■ When Nintendo secured the port of *Final Fight* it was a massive blow to Mega Drive owners. In typical Sega fashion, the company simply created its own clone: *Streets Of Rage*. The title scored a victory over it SNES counterpart by offering a two-player mode.



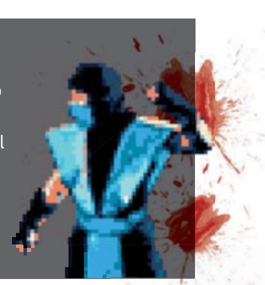
STREET FIGHTER II

■ When Nintendo managed to get the first home conversion of the legendary brawler it turned Nintendo's console into the must-have system of the era. A Mega Drive release would follow in due course, but the damage was done – the SNES had scored a massive victory over its rival.




SNES VS PLAYSTATION

■ The recently-unearthed prototype has resurrected interest in this system, which would have been a SNES and Sony CD-ROM drive combined. Nintendo ditched Sony the day after the console was announced. Sony wore revenge and the SNES-less PlayStation launched in 1994, conquering the industry.



MORTAL KOMBAT

■ Family-friendly Nintendo was always going to have an issue with Midway's gore-filled fighter. Ironically, the SNES got the best port in technical terms but at Nintendo's behest the gore was expunged. While the Mega Drive version also suffered censorship, a code could unlock the gore – making it the version everyone wanted.



PERIPHERALS

The SNES had some cool add-ons…

SUPER GAME BOY

■ This nifty device not only allowed you to play Game Boy games on your TV, but expanded a fair few games in interesting ways, too. The most obvious was that you could add borders to games you played or change the traditional four shades of green to different colours. Some titles featured enhanced sound, while certain games let you use a second SNES controller to play two-player games.

SUPER EVERDRIVE

■ If you're a fan of homebrew or backing up your own games then the Super EverDrive is an essential piece of kit. It plugs into your SNES and allows you to add ROMs to it via a SD card. There are various versions available and they included Game Genie cheat codes, with optional USB ports being available for homebrew devs. It's certainly not cheap, but it's very good at what it does.

SUPER SCOPE

■ The Zapper was popular on the NES, so Nintendo tried to replicate its success with the Super Scope. While it has some decent games in the form of *Operation Thunderbolt*, *Tin Star*, *Yoshi's Safari* and *T2: The Arcade Game*, it's not as essential as the Zapper. Its biggest problem was the peripheral's rather unweildly size; while it set the Super Scope apart, it ensured it wasn't as practical to use.

SUPER NES MOUSE

■ Originally packaged with *Mario Paint*, the SNES Mouse proved to be quite a well-supported peripheral. Although a large number of games were only released in Japan, over 30 titles were released in the West, including *Cannon Fodder*, *Eye Of The Beholder*, *Pieces* and *Powermonger*. The only thing that really lets it down is the relatively short lead that connects it to your SNES.

the games are leagues ahead of earlier releases. However, the SNES is unique in that the game it launched with is still considered by many to be its finest single piece of software. All of the developers we interviewed list *Super Mario World* as one of their favourite SNES games, with Mike Dailly even rating it as his favourite game of all time. This platformer is legendary even by today's standards, and is merely the cherry on the top of a library which surely ranks as one of the best the industry has ever seen. "I definitely have to choose *Super Mario World* as my go-to game," says Jonathan Town. "However aside from that obvious choice, I really love *Axelay*. It's a lovely-looking shoot-'em-up with a gorgeous soundtrack and balanced difficulty. What really makes it for me though is *Axelay* was a console exclusive, made especially to play to the strengths of the SNES, from the incredible effect on the vertical stages to subtle use of sprite scaling on the boss battles." Some of the console's best games are, refreshingly, a little off the beaten track, such as Human's *The Firemen*. "It's a story-led action game that sort of reminds me of the movie, *Die Hard*," explains collector Stuart Brett, who is planning to publish a book about Super Famicom art soon. "A fire breaks



out at a Christmas party in a corporate skyscraper and we play as Pete Grey and Daniel McClean as they tackle the fire, floor-by-floor, rescuing employees and taking out security robots along the way. It has some great dialogue and character design. It's a lot of fun."

What makes the SNES so remarkable is that it was strong in so many genres, and literally had something to offer for gamers of all tastes. However, one genre in which it excelled was the RPG. "It was the undisputed king of RPGs," continues Stuart. "From the *Earthbound*, *Secret Of Mana* and *Chrono Trigger*, to the *Final Fantasy* series, *Illusion of Gaia* and *Tales of Phantasia* – they were just incredible games that you could sink hours into. However, that's just the tip of the iceberg. The Japanese market had hundreds more, some of which have been translated and patched by fans. I'm still discovering new RPGs for

THE COLLECTOR Stuart Brett on collecting Super Famicom games

Roughly how many SNES and Super Famicom games do you have in your collection?
I have just under 400 now. Around a quarter of my games are stored away. I sold off quite a few games last year, mostly games I never play. They were taking over my games room and filling my wardrobe and I was running out space to store my clothes so I sold some off!

What single item has cost you the most?
Spider-Man: Lethal Foes. It was around £280. That was a recent purchase. All the other games I have which are worth thousands (according to ebay sellers) were never that price when I bought them. I have always tried to not overspend and I enjoy hunting down a bargain.

What item do you treasure most from this collection?
I enjoy playing my Super Famicom Box. It's a special version of the console that Nintendo developed for use in Japanese hotels. They contain some unique versions of some classic games, including *Star Fox* and *Mario Kart*.

Can you tell us a little about your book, *Super Famicom: The Box Art Collection*?
I wanted to design a book that celebrates the art and effort that went into game design in the Nineties. There will be over 250 games inside and editing the book with me is Steve Jarratt, ex-editor of *Edge*. The book will be published by Bitmap books and pre-ordering will be announced later this year.



25 YEARS



SEQUEL THIS

Ten SNES exclusives that deserved sequels

AXELAY 1992

■ Konami's superlative shooter was not only the perfect advertisement for the console's amazing graphical capabilities, it also played like a dream – no small feat when you consider how unsuited the SNES was to this kind of game. Amazing music, gripping gameplay and timelessly attractive visuals make for a true classic – a sequel was hinted in the end credits, but never came.



ARCANA 1992

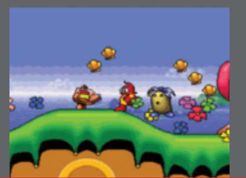
■ Unkind observers might brand this little more than a shameless clone of Sega's *Shining In The Darkness*, but it's actually a much better game that doesn't get near enough credit. Turn-based battles and dungeon-crawling make for a stern challenge, while the gorgeous visuals and a painfully beautiful soundtrack ensure it looks and sounds as good as it plays.

SOUL BLAZER 1992

■ While many fans lump this RPG in with fellow Quintet titles *Illusion Of Gaia* and *Terranigma* as a trilogy, the titles are actually self-contained offerings. Out of the three, this is perhaps the most underrated and most deserving of a sequel. It mixes exploration with real-time action, and the notion of rebuilding a world through your actions lends the game additional appeal.

PLOK 1993

■ The work of Ste and John Pickford, *Plok* is a typically zany platforming epic which apparently gained the appreciation of Shigeru Miyamoto himself. Colourful, action-packed and delightfully playable, *Plok* has since been resurrected by the Pickford brothers in a webcomic, and the 16-bit original remains one of the most unique platformers of the period.



E.V.O.: SEARCH FOR EDEN 1993

■ Arguably one of the most original games on the console, *E.V.O.* is a superb mixture of action and role-playing, with the player assuming control of various beasts from Earth's past. Success in combat allows you to level-up and evolve your creature which means they can better deal with environmental changes. It's bonkers, but compelling all the same.



UNIRALLY 1994

■ Known as *Uniracers* in North America, this fast-paced racing title focused on stuntwork and earned critical praise at the time of release. However, due to the similarity between the main character and the unicycle in Pixar's animated short *Red's Dream*, Nintendo was forced to bow to legal pressure and not manufacture any more copies once the initial 300,000 run had sold out.





» We greatly prefer the artwork found on Japanese games. The boxes feel a little sturdier too.

> **"THE SNES' WEAKNESS WAS LACK OF ARCADE CONVERSIONS OF ANY WORTH, WHILE THE MEGA DRIVE WAS DROWNING IN THEM"**
> Jonathan Town

▶ the console. The latest being *Verne World*, which is set in a futuristic theme park." While there were notable shooters – like the aforementioned *Axelay* – this is practically the only genre that Nintendo's console struggled with, thanks to the slow CPU. "The SNES' weakness was lack of arcade conversions of any worth, while the Mega Drive was drowning in them," admits Jonathan. "Shooters in particular – there are a few great ones, but only a handful."

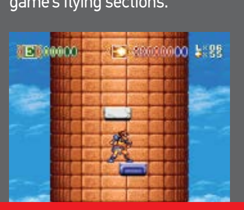
Like the Mega Drive, the SNES was supposed to get a hardware expansion which leveraged the incredible capacity of CD-ROM discs, and while Nintendo partnered with electronics giant Sony to work on the unit, it ever made it to market. The recent discovery of a SNES PlayStation prototype has put this ill-fated venture back in the headlines and jogged the memories of developers who were shown the tech at the time. "During the winter 1992 CES show, I was lucky enough to attend a private demonstration of a CD-based Sony prototype," says Brendan. "The demonstration took place in fancy hotel room well away from the show, and it was to a small group of Nintendo representatives along with a small contingent of top Rare people – and me! The demo consisted of a video streaming from the CD. I liked the concept technically, but we were not impressed with the video quality." Mike Dailly recalls that DMA was actually commissioned to produce software for the device similar to that which Brendan describes. "DMA was originally approached by Nintendo because we had a video playback engine for it. We demoed a clip of *Star Wars* playing from a 4MBcart, and they were very interested in the tech for the CD-ROM system. But it all went quiet and we started doing *Unirally* instead."

The popularity of the SNES has ensured that it is in high demand with collectors even today. Starting your own collection isn't expensive, and recent developments have lowered the barrier to entry on the more common releases. "A lot of the games have dropped in price fairly dramatically due to availability on emulators or via the Virtual Console on Wii and Wii U," says Jonathan. "US and UK RPGs still command ridiculous prices, but there are plenty of great games to be had for less than £20. The real problem is finding them in good condition – the cardboard packaging sadly doesn't fare very well if not looked after." While finding some common games at a decent price isn't going to be hard in today's market – providing you're happy with just a cartridge – the



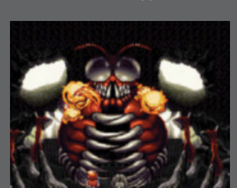
SKYBLAZER 1994

■ A rare case of Sony Imagesoft making a decent game, *Skyblazer* is an attractive action platformer which made good use of the console's Mode 7 capabilities. Coming towards the end of the console's lifespan *Skyblazer* was perhaps unfairly ignored, and certainly deserved a 3D sequel which would have made better use of the game's flying sections.



SECRET OF EVERMORE 1995

■ Following the success of *Secret Of Mana* Square decided to found a North American studio and produce an RPG aimed squarely at western audiences. While *Secret Of Evermore* wasn't up to the standard of its Japanese siblings, it was unique compared to a JRPG. It's a shame Square didn't produce more titles of this type.



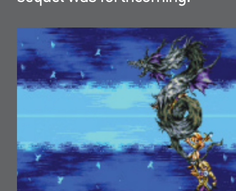
MAJYUUOU: KING OF DEMONS 1995

■ Konami's shooter was not only the perfect advertisement for the console's graphical capabilities, it also played like a dream – no small feat when you consider how unsuited the SNES was to this kind of game. Amazing music, gripping gameplay and attractive visuals make for a true classic – a sequel was hinted in the end credits, but never came.



BAHAMUT LAGOON 1996

■ One of the last great RPGs of the SNES era, this Japan-only release was tipped for a western localisation but it never happened. It has been fan-translated in recent years and is well worth seeking out, if you're happy to dabble with a spot of emulation. *Bahamut Lagoon* sold almost half a million copies in Japan but no sequel was forthcoming.



more desirable titles are rising in value. "Videogame culture is embedded in the mainstream," says Stuart. "It's lucrative now. I think the Internet has made the retro gamer's world smaller. The chances of finding a genuine bargain online are growing smaller. I can remember paying £60 for *Majyuuou: King of Demons* back in 2007 for my Super Famicom. I thought that was expensive. I've seen copies on eBay now for over £1,300."

The SNES is one of those machines that simply grows in stature as the years roll by, and there's a good chance that people will still be talking about it in respectful tones in another quarter of a century. But why did Nintendo's console make such a massive and long-lasting impact on gamers? Why is it so fondly remembered when the hardware which followed ushered in the era of revolutionary 3D realism? "It was the final hurrah of the classic era of 2D gaming," replies Brendan. "It was a high point before the shift into the modern era of 3D polygons. As exciting as the N64 and its contemporaries were at the time, those games look dated. SNES games by comparison look gloriously retro. Also, the move to 3D created a huge increase in the complexity of games and their controllers which only enhances the charm of the 16 bit era." Chris Sutherland also feels it was the system's mastery of 2D which makes the SNES so beloved. "I think it was the last home console that used custom hardware devoted to 2D sprite games," he explains. "After that there was a transition to more general purpose CPU/GPU architectures. I think that's one of the reasons it stands out – it was almost the de facto machine for creating 2D games. Later consoles could still do that, but people started to veer towards 3D as it was the new thing."



» You can use this device to connect to the Satellaview. It reminds us of the old pictures of the CD-ROM add-on.

For hardcore fans like Stuart, it's all about the software. "It introduced so many franchises for Nintendo," he concludes. "To have new games like *Mario Kart*, *F-Zero*, *Starfox*, and *Pilotwings* released within the space of a few years was exciting. There was a drive behind Nintendo in those days to try new ideas, particularly in Japan and that enthusiasm was instilled across third-party developers. Most games were coded by teams, so creativity and lack of interference was in full flow. Enix, Square, Konami, Capcom and countless others developed some truly stunning titles for the console. Recent fan translations have also breathed a new lease of life back into the console, with lots of Japanese-exclusives now being available to Westerners for the first time." So here's to another 25 years of Nintendos legendary console. *

POUND SAVERS

Excellent Virtual Console options for those that can't collect the real deal

CASTLEVANIA: VAMPIRE'S KISS / DRACULA X

£200 (US) / £90 (JPN) / £225 (PAL) / (VC) £5.49



■ While it's not a patch on the PC Engine CD title from which it is derived, *Vampire's Kiss* is insanely collectable in its physical form, and demands a steep price for the most committed *Castlevania* fan. As such, this download is a much better choice for anyone interested in playing it.

FINAL FIGHT 3 £130 (US) £120 (PAL) / (VC) £5.49



■ The third *Final Fight* outing on the SNES may not be as refined as *Streets Of Rage 2*, but it's the finest example of the genre on Nintendo's console. Haggar returns with new allies and *Street Fighter*-style moves. Its pricey second-hand but this digital release is infinitely better value.

DEMON'S CREST £170 (US) / £125 (JPN) / £260 (PAL) / (VC) £5.49



■ A commercial disaster upon its release in North America, this spin-off from the *Ghosts 'N Goblins* series focused on Firebrand, an enemy in the original games who was elevated to hero in *Gargoyle's Quest*. A mixture of platforming and RPG, this is a true hidden gem.

MEGA MAN X2 £160 (US) / £25 (JPN) £240 (PAL) / (VC) £5.49



■ The second *Mega Man X* game is notable on the SNES as it's the only home version of the game (a cut-down mobile game also exists). It builds upon the groundwork of *Mega Man X*, being far more action-packed than the earlier NES games and quite a bit easier too.

WILD GUNS £350 (US) / £160 (JPN) / £250 (PAL) / (VC) £5.49



■ A steampunk Wild West shooter with an excellent co-op mode and some brilliant, screen-filling boss battles, *Wild Guns* is yet another in-demand SNES release which requires deep pockets to own. Thank goodness, then, for this Virtual Console release.

EARTHBOUND £500 (US) / £20 (JPN) / £N/A (PAL) / (VC) £6.99



■ Recently available on the Wii U Virtual Console, *Earthbound* is a quirky and endearing RPG which, instead of featuring the usual fantasy setting, boasts a modern world invaded by aliens. The game never got a European release, and the American version is incredibly expensive.





With the 3D graphics revolution of the Nineties in full swing, Sega leveraged its advanced technology to create this extraordinarily exciting lightgun game. Nick Thorpe radios in from chopper command to find out how the AM3 team did it…

GUNB

Sega's AM3 department always made lightgun games that stood out from the crowd. Other entries in the genre tended to involve static scenes and slow, horizontal shuffles – even Sega's own *Virtua Cop*, the first ever polygonal lightgun game, was a sedate game that rewarded pinpoint accuracy and quick reloading. On the other hand, AM3 produced lightgun games like *Rail Chase* and *Jurassic Park* – thrill rides, characterised by impressive motion cabinets and crazy chase sequences. With the team's tradition of combining shooting and spectacle, it's easy to assume that *Gunblade NY* was a natural transition from past 2D successes to the 3D hardware of Model 2, but despite the fact it turns out that couldn't be further from the truth.

"I did not set out to develop a game that differed from other Sega shooting titles but the end result was very different," recalls Makoto Yamamoto, planner and director on *Gunblade NY*. In fact, it wasn't intended to be a shooter at all. "The concept was for a fast-paced flight game," he explains. "However it is difficult for a player to control themselves in the air so I decided to make the flight automatic. The addition of shooting added the skill removed by taking away the flight controls."

The game design wasn't the only thing that changed during the planning stage – initially, the location was far closer to home for Yamamoto and his team. "Our first prototype was based in the Tokyo area, my inspiration was the latest sci-fi movie at that time," he explains. "However on-screen it looked like a cheap Japanese soap opera. So I changed the location from Tokyo to the most famous city in the world,

GUNBLADE NY 101

■ As a Special Air Assault Force gunner, your job is to swoop through the streets of New York on a helicopter gunship and take out the terrorists that have occupied the city. You've got unlimited ammunition and no civilians to worry about hitting, so keep your finger on the trigger!

» [Arcade] A chase along the Brooklyn Bridge provides a thrilling start to the Hard route.

LADE NY

New York." With that, the basic game outline was set. Set in the then-future year of 2005, players would fly on paths through the Big Apple on a helicopter gunship, blasting away at the terrorists that are attacking the city.

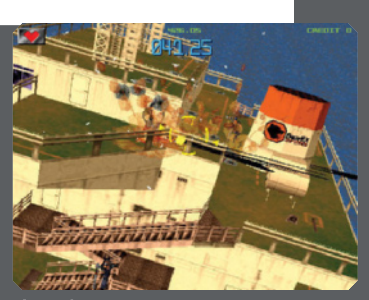
The team wasn't just trying to model a city that looked a little like New York, they were aiming for genuine authenticity. Each of the two available routes would take players on a tour of the city – the Easy route started off in Times Square, while the Hard route featured four completely different stages starting with a vehicular chase across the Brooklyn Bridge. In order to accurately recreate these famous landmarks, the team had to put in the requisite research.

"Our team did a photoshoot in New York with traditional cameras, at that time digital cameras were not yet mainstream," explains Yamamoto. "I can't remember how many photos were taken but we had a huge cardboard box full by the end and it took two weeks to organize them so that we could reconstruct the city digitally." In a twist of irony, the director remarks that the research effort began to look a little too close to what was to be depicted in the game itself. "We took lots of photos of JFK Airport, Times Square and the United Nations headquarters. Our team must have looked like we were reconnoitring for some kind of US attack! Fortunately, we were not arrested."

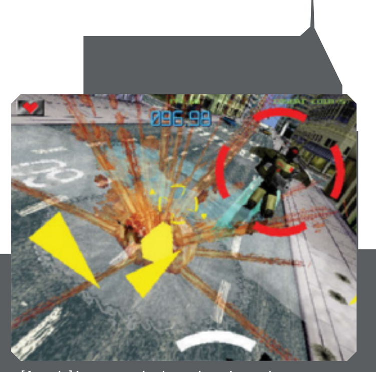
Having safely returned to Tokyo with a city ready to model, the next job was to fill it with enemies to beat. As the primary on-screen characters, Yamamoto felt that it was important that they convey the right feeling. "I wanted to show an 'emergency situation' so weapon designs were Russian in style. I liked the way that they clashed with the American downtown scene," he recalls. Of course, at this point the Cold War was fresh in the minds of people everywhere, having only ended a few years earlier – seeing Russian weapons all over New York really would have been jarring.

However, the intent was never to make the player feel too heavily threatened. "Game developers always tend to show that enemy characters look cooler," Yamamoto explains. "I felt that it was not so much fun when we meet realistic or cool enemies because it appears too violent or scary. So I insisted that the enemy design should be unsophisticated to help players feel, 'I could beat them!'" Designed as robots, enemies ranged from balaclava-wearing terrorists to footsoldiers clad in purple and orange, and even jet pack-powered robots. For end of stage bosses, highlights included a rival helicopter, an anti-air gun emplacement and a giant mech.

One of the unusual features of *Gunblade NY* was the way that the enemies moved around the screen. In many shooting games enemies are scripted to perform very specific movements when they appear on the screen, but *Gunblade NY* had enemies that appeared to react to the events around them. They could be knocked around by players when hit, and near-misses would cause them to ▶



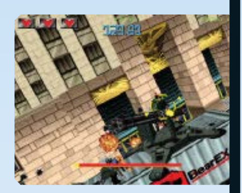
» [Arcade] Picking out enemies on the deck of this ship is quite tough from afar.



» [Arcade] Later enemies hover in on jet packs to make life more challenging for the player.



» [Arcade] Dynamic camera work allowed you to get up close and personal with the bad guys.



» [Arcade] Weapon designs were modelled after Russian military hardware, to contrast with the American setting.



» [Arcade] All of the enemy animations were actually designed on an arcade joystick!



IN THE KNOW

» **PUBLISHER:** Sega
» **DEVELOPER:** Sega AM3
» **RELEASED:** 1995
» **PLATFORM:** Arcade
» **PLATFORM:** Lightgun shoot-'em-up



DEVELOPER HIGHLIGHTS

JURASSIC PARK
SYSTEM: Arcade
YEAR: 1993

RAIL CHASE 2
SYSTEM: Arcade
YEAR: 1994

THE LOST WORLD: JURASSIC PARK (PICTURED)
SYSTEM: Arcade
YEAR: 1997

> **"The most referenced movies were Léon and John Woo's Hard Boiled"**
> Shinichi Ogasawara

run, dive and roll out of the way, with the camera swinging around to follow their movements. It's an impressive feature, but the story behind it is even more interesting. "*Gunblade NY* did not use motion software," says Shinichi Ogasawara, planner and assistant director on the game. "Animation is calculated from angle of their bone position so that means motion design was actually made by a game designer, not artwork staff – it was me!"

We'd expected that processes might not be strictly specialised in the early days of 3D, but Ogasawara's next revelation is a big one. "Motion was developed by the joystick and buttons of an arcade cabinet," he reveals. "I can't operate motion software, so the lead programmer made a special tool for it." To develop the movements used by the enemies, Ogasawara looked to the cinema. "The most referenced movies were *Léon* and John Woo's *Hard Boiled*. Both movies are not usual movies, but motion was clear to find the situations."

Something Hollywood-style did make it in though, with a focus on pyrotechnics that would satisfy even Michael Bay fans. "We used polygons for the explosion effects to create spectacular dynamic scenes. The final boss explosion used one block of the graphics ROM of Model 2," explains Yamamoto. But such spectacle came at a cost – despite having the state of the art Model 2 technology at their disposal, the AM3 team had to work within heavy restrictions, mostly related to the polygons that the hardware could push. "We limited the number of enemies on screen to eight at one time and varied the number of polygons depending on the distance," Yamamoto recalls. "4,000 dedicated for very short range and as low as 20 for very distant enemies but it was too much for the GPU."

The result was that the team had to find creative ways to work around the limitations of the hardware. "The background was split into a number of subdivisions so that only what was to be shown on screen was rendered," remembers Yamamoto. "We even changed the bullet shape from a hexagon to a pentagon to save polygons!" Thankfully, AM3 was able to work out the solutions and maintain the standard that they wanted. "Speed was not an issue and the frame-rate was 60fps as Model 2 can deliver 4,000 polygons per frame," Yamamoto tells us. "The breakdown of polygons was 2,000 for backgrounds, 1,000 for enemies and 1,000 for explosions."

All that was left was to show *Gunblade NY* off to the public, and location test feedback was positive. When asked about changes made after the test phase, Yamamoto says, "I added Score Attack mode and changed the order of stages. That's it." The score attack remix gives players five minutes to score as many points as possible across four stages, adding an incentive to return to the game. When the game made it to a full release, the cabinet stood out thanks to its weaponry – a pair of giant machine guns fixed to the cabinet, which offered a juddering recoil action.

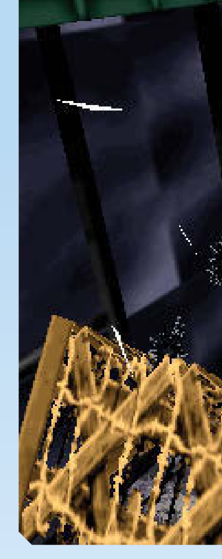
Over the years, *Gunblade NY* has been a point of reference for Sega's arcade development teams. *LA Machineguns* was essentially a sequel, with the premise of shooting enemies from a flying vehicle shifted over to California. The 1998 game ran on the Model 3 board and added a new combo system to keep score chasers satisfied, while changing the structure to a standard four-stage campaign. However, that wasn't the only game to be inspired by *Gunblade NY*. "One of the concepts for *Let's Go Jungle!* was 'Comedy-style for *Gunblade NY*,'" reveals Ogasawara,



» [Arcade] Enemies like to dodge and run, so you'll have to chase them about a bit.



» [Arcade] The team visited New York to ensure that real-life landmarks looked sufficiently authentic.



» [Arcade] When the chopper goes close to ground, you'll see dust kicked up by the rotor.

EMPIRE CITY EMERGENICES

As the world's most famous city, New York is one of gaming's most frequently attacked locations…



SAVE NEW YORK 1983

■ Aliens have descended upon the Big Apple with the intention of taking a bite! As they try to chomp their way through buildings, only you can stop them by jumping into a jet and delivering justice, and venturing into the subway to stop ground attacks.



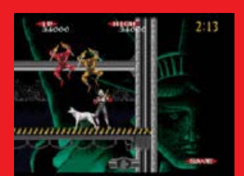
COBRA COMMAND 1984

■ Data East's shoot-'em-up resembles *Gunblade NY* – like Sega's game, you're attempting to thwart a terrorist plot from a helicopter. The first stage is set in New York, opening with enemy helicopters around the Lady Liberty.



ACTION IN NEW YORK 1990

■ Vile Malmort's alien forces have managed to link their orbital station to Earth using an 'astrotube'. The Special Cybernetic Attack Team's cyborg soldiers Arnold and Sigourney are the planet's best hope of repelling the invasion.



SHADOW DANCER: THE SECRET OF SHINOBI 1990

■ The Union Lizard cultists have taken over New York, taking ordinary people hostage and wrecking the place. It's up to our favourite ninja and his faithful canine companion to rid the city of the baddies.



DUKE NUKEM: MANHATTAN PROJECT 2002

■ Mech Morphix has decided that he's going to take out New York, and he's using slime to turn animals into monsters to achieve his goal. This game saw Duke return to his side-scrolling platform roots.



who was the director of the popular 2006 title as well as its 2010 sequel *Let's Go Island*. They also adopted the fixed machine guns and vehicular action, but were light-hearted affairs which featured players blasting bugs in holiday hotspots.

Despite having generated a legacy, *Gunblade NY* didn't receive a home conversion. According to Ogasawara there's a technical reason for this, as the game's motion makes it hard to convert. However, 15 years after its arcade release the game finally arrived in the home, as part of a 2010 double pack with *LA Machineguns* for the Wii. It's a very good conversion that plays authentically and adds widescreen support, but some minor changes were made to the game. Voices are played through the controller's speaker and a couple of textures have been replaced, most noticeably in Times Square, which now boasts Sega-themed adverts in place of the adverts from real companies that were used in the original. It's now quite inexpensive to buy, and is the best option to play the game.

Since the release of *Gunblade NY*, Shinichi Ogasawara has stayed with Sega and works with its arcade departments, keeping his hand in game design with games like *Transformers: Human Alliance*. Makoto Yamamoto has moved on from Sega, transferring to the company's darts subsidiary DartsLive. Having moved on from the videogames industry, we're curious to know how he feels looking back at the game. "Well, I can say it is a little rough," he concedes, "but it was developed in the good days and pushed the limits of Model 2!" *

Our thanks to Shinichi Ogasawara for the introduction and translation.



» [Arcade] Up to 1,000 polygons-per-frame were used for explosion effects – as many as were used to draw enemies!

GUNNER'S GETAWAY

The sightseer's guide to the carnage of Gunblade NY

TIMES SQUARE

GAME SECTION: Easy Stage 1

1 Terrorists are attacking the hub of Broadway, dropping in from helicopters and attacking from trucks.

MIDTOWN MANHATTAN

GAME SECTION: Easy Stage 2

2 Having overwhelmed the NYPD, the terrorists have embedded an anti-aircraft gun in Midtown. Your pilot will have to perform some daring feats to reach it.

UNITED NATIONS HQ

GAME SECTION: Easy Stage 3

3 You reach the building just in time to see a massive blast, bringing armed conflict to a place that should stand for peace and diplomacy. Time to halt the assault!

CARGO SHIP

GAME SECTION: Easy Stage 4

4 The bad guys are on the run and fleeing across the East River, but they have one last ace up their sleeves – a giant mech, capable of multiple missile attacks.

BROOKLYN BRIDGE

GAME SECTION: Hard Stage 1

5 Enemy motorbikes and jeeps are making their way across the bridge, leading to a high-speed chase – but another helicopter is easily your biggest concern here!

BATTERY PARK

GAME SECTION: Hard Stage 2

6 The terrorists have managed to acquire a huge warhead and a mobile launcher to go with it, and they plan to launch it from this park at the south of Manhattan.

GRAND ARMY PLAZA

GAME SECTION: Hard Stage 3

7 Adjoining the corner of Central Park and opposite the world-renowned Plaza Hotel, the terrorists unveil the deadly mech that they hope will swing the battle in their favour.

MIDTOWN NIGHT

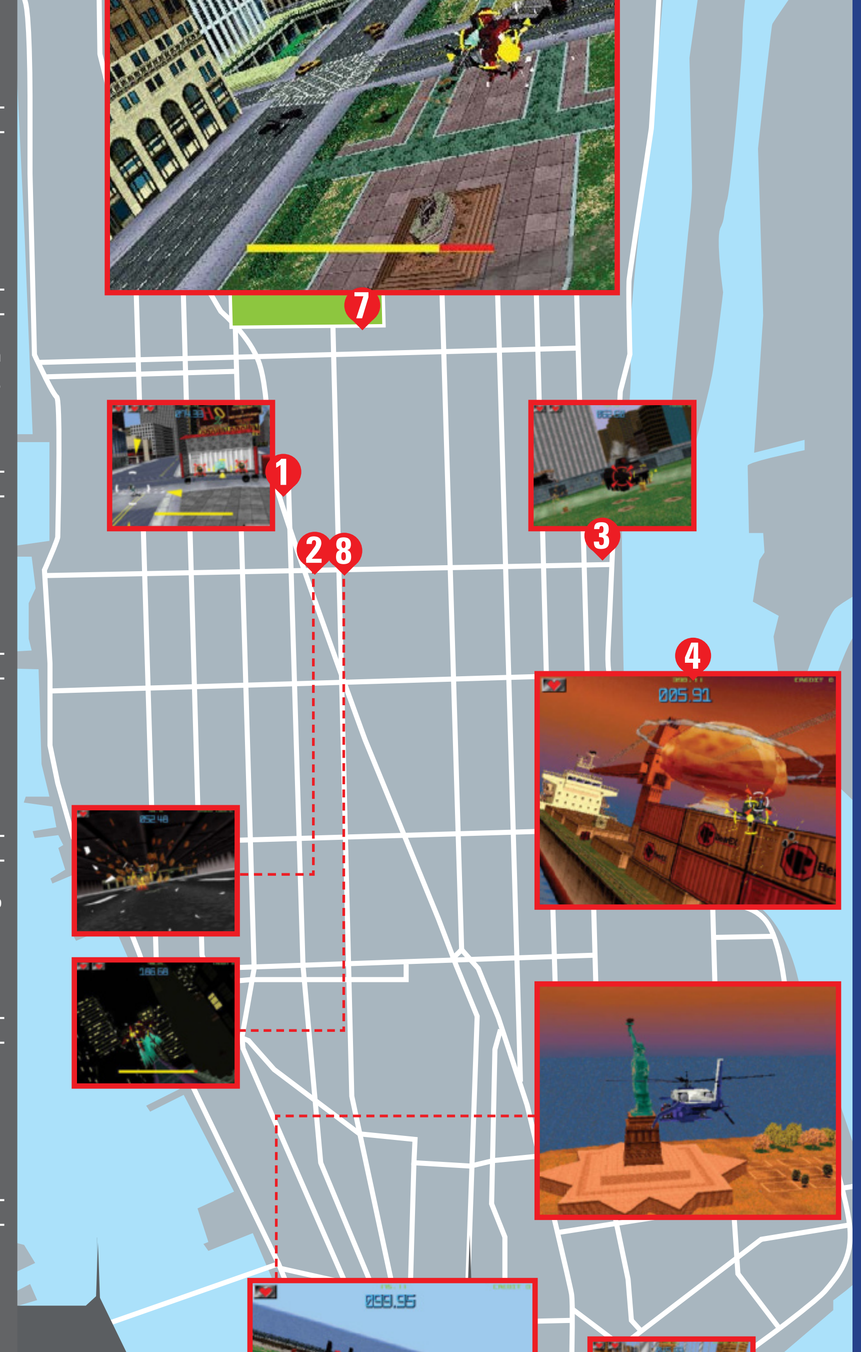
GAME SECTION: Hard Stage 4

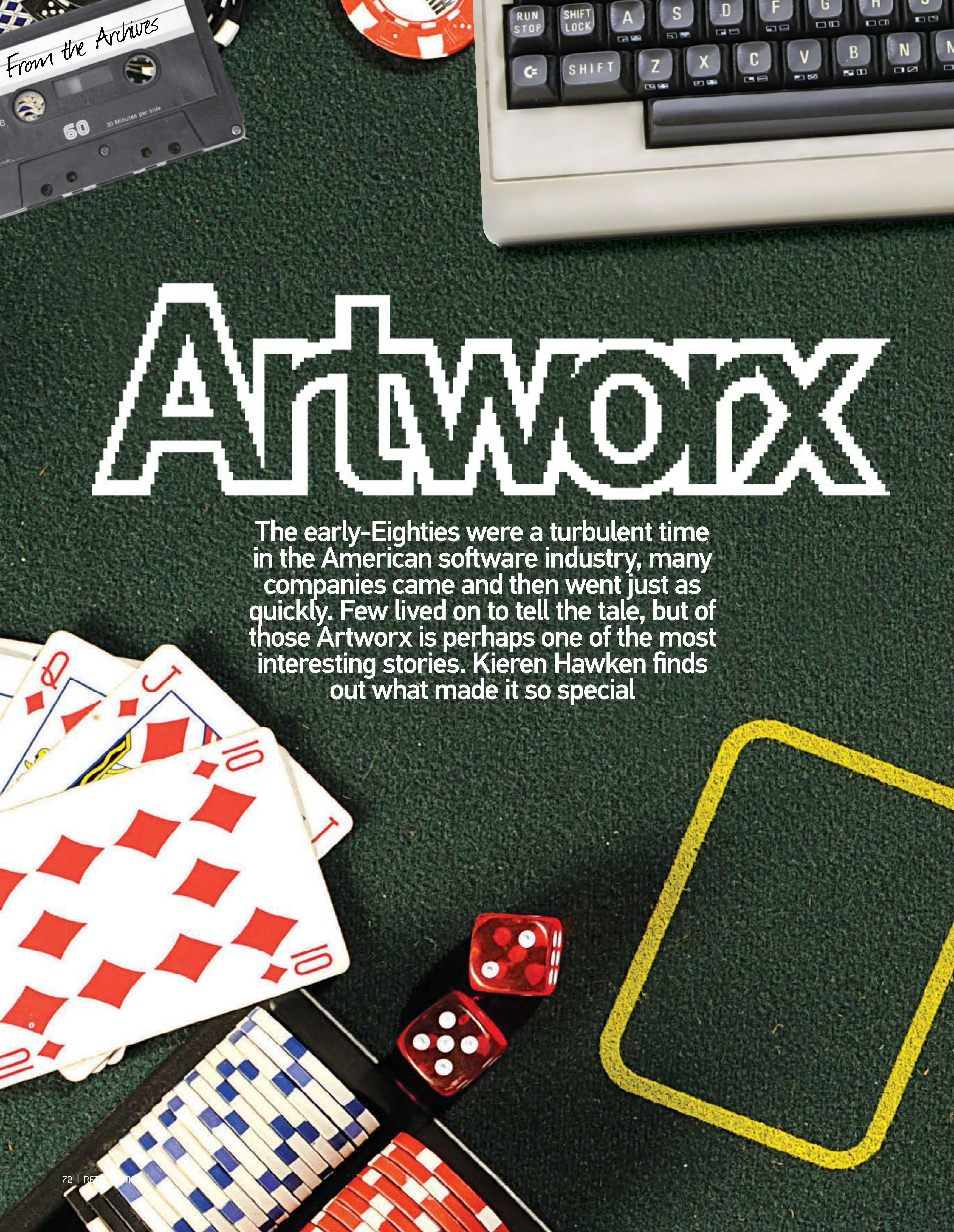
8 Retreating into the densely-packed Midtown as night draws in, the terrorists hope to overwhelm you with poor visibility and their ultimate robotic weapon.

STATUE OF LIBERTY

GAME SECTION: Ending

9 You've defeated the terrorists and earned your victory. Congratulations! Now, where better to celebrate than New York's most iconic landmark?





Artworx

The early-Eighties were a turbulent time in the American software industry, many companies came and then went just as quickly. Few lived on to tell the tale, but of those Artworx is perhaps one of the most interesting stories. Kieren Hawken finds out what made it so special



» [Commodore 16] Anco released an impressive port of Artworx's hugely popular *Strip Poker* for the Commodore 16 in Europe.

To tell Artworx's story properly we need to rewind 40 years and introduce its founder, one Arthur 'Art' Walsh. "It all began in the mid-Seventies at Xerox in Rochester, New York," reminisces Art. "On graduation I ended up there working on colour imaging systems. Back then there were no PCs, just large mainframes and small terminals connected to them. I soon realised the work I was doing was very repetitious and could easy be done by a microcomputer. So I went to the computer lab and got them to write a program to help with my work. After looking at the program code I soon realised that it actually read a lot like English and I thought, 'What the heck,' and decided to plough into it myself to try and improve it." This led Art into a change of position within the company (Xerox) as he goes on to explain: "I was programming in Fortran and got pretty good at it, so I was moved to become head of our computer department and take this part of our business forward. That was at the end of the Seventies and my boss bought an Altair 8080 PC kit. We both built it and then put it in the labs to help with our data processing. The interesting thing about this was that not only did we have to build the computer ourselves, we also had to write our own software as there just wasn't any you could buy!"

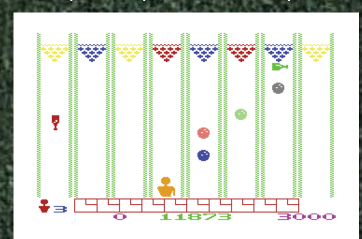
Finally getting his hands on a microcomputer, Art began to explore new avenues of this burgeoning technology. "We found out that a new language called BASIC had been made available to buy on an audio tape," Art tells us excitedly. "So we bought an IO card for the Altair that allowed us to transfer data to and from tape, that BASIC program was produced by a small little company called Microsoft. We then became aware of lots of cheaper home computers coming out such as the Sinclair from the UK and the Commodore PET. It was this that encouraged my boss and I to make a business out of it. We already had a few programs that we had cobbled together and so took out a page in *Byte* magazine to sell them. The name we chose for the company was Dynacomp, and eventually we started to sell this software in decent numbers so had to make a decision on whether to continue with this full-time and we did. So we both quit Xerox, rented an office and started concentrating on making new software full-time. At the time there were loads of new computers coming out so we tried to buy as many of them as possible and convert our programs over to them."

> **"The interesting thing about this was that not only did we have to build the computer ourselves, we also had to write our own software as there just wasn't any you could buy!"**
> Art Walsh

But it wasn't plain sailing at Dynacomp, though, and it wasn't long before Art chose to go his own way. "Sometime back in 1980 my partner and I had a big fall out about the direction of the company," he ruefully explains. "He wanted to go down a more technical path, as he was a PHD scientist, while I wanted to concentrate on games. We had just contracted two really talented Atari programmers called Doug McFarland and Dennis Zander who had sent us some games to publish. So I spoke to them ▶



» [Atari 8-bit] *Strip Poker* appeared on the Atari 8-bit and featured some advanced graphics for the time.



» [Commodore 64] *Alley Oops* is a fun bowling game for the C64, despite the strange colour scheme.

In The Know

- Artworx was the first company to come up with a computerised version of *Strip Poker*, much to the delight of teenage boys everywhere at the time.
- Its partnership with Anco saw it get ripped off badly as Artworx never received any royalties from its products.
- Dennis Zander's *Intruder Alert* is credited as helping many 8-bit owners learn to program with its open source code.
- *Linkword* was developed by Dr. Michael Gruneberg at Swansea University and ended up spanning nine different languages including Greek and Hebrew.
- Marsha Meredith's *Hodge Podge* was originally written to help her young daughter learn words and spelling in a fun way.
- Ed Schneider who would go on to lead games development at Atari Corp had several early games published by Artworx.
- The Amiga version of *Strip Poker* was completely re-written because Doug McFarland didn't like the 'cheating A.I.' on the Atari ST version.
- The Artworx name was conceived by a Boston advertising company which predicted that videogames would become an art form. It was also a great play on the founder's name.

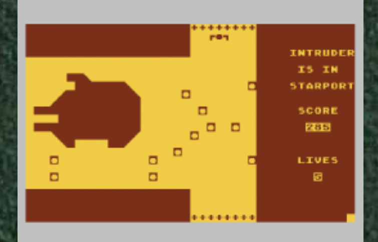




» [Commodore 64] *Battle Through Time* is an excellent take on *Moon Patrol* that was very well-received by publications of the time.

about setting up a new company and to cut a long story short we set up Artworx." Dennis remembers the story of how it all came about very well. "I had just bought one of the very first Atari 800 computers and started playing with it. The first title I submitted to Dynacomp was *Giant Slalom*, it was written in BASIC and so was pretty crude. But then I began to learn machine code and before long I was submitting more programs to Dynacomp and this is where I got to know Art Walsh and then later Doug McFarland who was doing pretty much the same thing as me. Doug's story is not too dissimilar: "I was a technician at Xerox and was involved in lots of electro-mechanical stuff and programming there. While there I soon became fond of the 6502 processor and so when I heard about the new Atari computers and the games coming out on them I thought, 'Wow, I can do that!' So I managed to persuade my wife to invest some of our limited household income into buying an Atari 800. My first project was *Beta Fighter*, which was more or less an experiment to see if I could actually make a decent game, and it turned out well so I shopped it around. I soon came across a local company called Dynacomp and decided to set up a meeting with them to show them my game. My contact was a guy called Art Walsh, who was running the games division there and happened to also work at Xerox. He liked the game and wanted to publish it so signed me up and wanted me to come up with more games. He then introduced me to Dennis, who was a fellow Atari 800 owner, and as it turned out we had a lot in common and we soon started working with each other. Before long, Dennis, Art and I got talking and decided that we should set up our very own company."

It was decided that Art would head up the new company as his partners chose to keep their day jobs, worried that the games industry wouldn't give them the income or security they needed. Art needed more programs to publish to get the cash coming in and also needed to find a focus for the new company. "Initially we decided to concentrate on the Atari computers. We all had an Atari 800 and thought it was a fantastic machine," Art remembers. "The Atari community was also a very close-knit one with lots of user groups we could tap into for help. One of the first things we did was the Artworx prize, where we advertised in magazines to encourage people to send in programs to us to be published and the best would win a $500 prize. Back then most of the software was still being [created] in BASIC, although Dennis and Doug were just starting to get into machine language. The one game submitted that really impressed me was a title called *Golden Gloves*, we snapped that up straight away." Dennis had a great story from these early days of game development at Artworx. "The initial programs we had done were taken across to Artworx but after I got



» [Atari 8-bit] Based heavily on *Star Wars*, Dennis Zander's *Intruder Alert* was written completely in BASIC.

» [Atari 8-bit] The first game in the *Monkey* series of games, *Monkeymath* was the real success for Artworx.



» [Atari 8-bit] *Golden Gloves* was the very first winner of the Artworx prize, a $500 cheque for the best game submitted.

The Anco Disadvantage

Artworx's deal with Anco didn't work out too well…

In 1984 Artworx was contacted by a guy called Ken Simpson who ran a company called Advantage Computer Supplies in Mississauga, Ontario, Canada. He and Art had met a few times at various shows and Artworx were looking to expand and get some investment into the company. Ken was looking for an entry into the US market and them a good prospect. He invested into Artworx made an agreement that his company in Canada would become known as Advantage Artworx, to capitalise on the name. He then struck an agreement with Anil Gupta and his company Anco, to distribute its games in Europe. Anco would not just publish its games but Artworx would also be able to publish Anco's games in the US. The whole idea was that the three companies would share products to meet a wider user base.

Unfortunately for Artworx the deal didn't work out too well and it ended up losing out on various royalties for its games. Art wasn't happy about how the deal panned out, telling us: "We decided to end our agreement with Advantage and buy back Ken's share in the company immediately."

Timeline



Art Walsh leaves Xerox and starts his first software publisher, Dynacomp, with his former boss.



After an argument Art Walsh gets together with Dennis Zander and Doug McFarland to start Artworx.



Artworx offer a $500 cash prize for the best games submitted to them as well as deal to publish future titles.



Artworx program and publish the very first *Strip Poker* game to a huge amount of fanfare and controversy.



A partnership is formed with Canadian company Advantage Computer Supplies to help get its games into new markets.



Anco signs a deal with Artworx to publish its games in Europe, only for the deal to fall through.



Strip Poker uses digitised graphics for the very first time as the 16-bit Atari ST version hits the market.



Artworx expand on the *Strip Poker* success with a series of data disks that even feature male models.



Centrefold Squares is released to expand the range of adult games available from the company.



The very last Atari 8-bit title is released, a fifth update of Art Walsh's popular *Bridge* program.



Artworx start to move with the market and concentrate on games for the previously business orientated Apple Mac and VGA enabled PCs.



As Windows 3 starts to change the PC market, Artworx become one of the first publishers to use it for playing games.



Artworx start to sell software online for the first time as it winded down its operations in the games market.



Strip Poker 8 is released for the PC, marking the last game in the hugely successful and iconic series.

Defining Games



HAZARD RUN 1982

■ Dennis Zander's *Hazard Run* was based on the popular TV show *Dukes Of Hazard* and that is obvious from the moment you start playing it. The orange Dodge Charger takes the starring role and you see Bo and Luke jump in the car as you start. The idea is to race through the game avoiding the obstacles and going off the jumps. There are loads of neat touches like the chickens, whose feathers fly when you run them over, and the sideways viewpoint when you hit the jumps. There is no doubting that *Hazard Run* was the first truly professional product to come from Artworx.



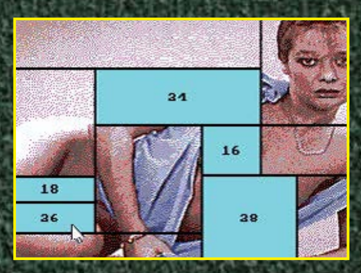
STRIP POKER 1983

■ It would be impossible to not put this game on the list, *Strip Poker* is the game that made Artworx and opened up the software industry to something it had never seen before: adult gaming. This game was a huge hit across the world and inspired many clones that live on to this day. But the game wasn't just about trying to get somebody's clothes off, it also played a very mean game of poker too. It was also one of the very first games to add some real personality to the opponents you faced. *Strip Poker* assures Artworx's place in the history books.



CYCLE KNIGHT 1986

■ Artworx released quite a few quirky original games that have been forgotten by time by *Cycle Knight* was definitely our favourite. It's a kind of arcade adventure game with a really nice isometric viewpoint where you must make your way round the map trying to find and rescue the princess. Along the way you fight the enemy hordes, avoid the many hazards and pull of some death-defying stunts. *Cycle Knight* has some really attractive visuals, alongside some action packed gameplay and a few nice touches such as the palette swapping to keep the game varied and fresh.



CENTERFOLD SQUARES 1988

■ After the enormous success of *Strip Poker* Artworx needed a follow up that would once again tap into the same adult gaming market, and Doug McFarland's *Centerfold Squares* was just that. The basic gameplay of this title is taken from the classic board game Reversi (also known as Othello) and sees you trying to capture your opponent's squares. Doing this will reveal parts of a picture, a very seedy picture at that. There is a wide range of opponents to suit different skill levels and we defy you to try and defeat the hardest ones that this game has to offer.

> **"My first project was Beta Fighter, which was more or less an experiment to see if I could actually make a decent game, and it turned out well"**
> Doug McFarland

chatting more to Doug I discovered that he had found some great documentation on the inner workings of the Atari computers and this made programming in machine code a lot easier. So we set about making a game based on the TV series *Dukes Of Hazard*, which was a real favourite of my son Brian. It was great to see my son playing the game and as I written it for him and I decided that any royalties I earned from the game I would give to him. I then did the same for my older son with another game. My daughter was the problem, she was my middle child, and I tried lots of different things for her before producing a program where you could take a model and change her outfits, hair styles, colours etc.. It wasn't interesting or exciting and it wasn't successful to say the least."

Artworx was starting to make inroads into the industry and doing okay, but it needed that big product to launch it into the limelight, that game that would really get the company noticed and so Art held a staff meeting one night to discuss this. "We started going over sales figures and I made the observation that my *Bridge* program was massively outselling Jerry White's *Poker* program. We couldn't understand this because while bridge was a popular game, poker was pretty much played by everyone. So we couldn't understand why Jerry's game wasn't selling more, it wasn't like there were loads of other poker programs available for the Atari computers. There was a long silence while we pondered this conundrum and then Doug jokes, 'Well maybe it would sell more if it was strip poker!' I turned around and said, 'Yes, that's it!' That is what we are looking for, that's the hook!" We turn to Doug to find out how the guy who came up with the whole idea remembers it. "Yes, it was my idea! Somebody ▶

» [Mac] The Mac version of *Strip Poker* is more like a Victorian *What The Butler Saw* with its monochrome graphics.



» [Atari 8-bit] The first game developed by Doug McFarland, *Beta Fighter* was a simple high score-based shoot-'em-up.



» [Commodore 64] The third entry in the *King Arthur* series, the C64 version of *Gwendolyn* had many graphical enhancements over the Atari original.





The DNA of Artworx



SEX SELLS

■ Artworx was the first company to release a commercial game that used real models and full-frontal nudity of both women and men. It soon found that this proved somewhat popular when *Strip Poker* became a huge success, but also incurred the wrath of parents and retailers alike who refused to support the product.

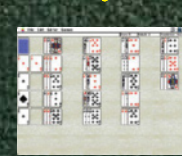
BACK TO BASICS

■ Many of Artworx's early titles were written in BASIC, as were most of the early computer games of the day. When you look at its library you can clearly see the advancement from simple character based programs to complex machine code software. It was a leap that many in the industry would take.



LONGEVITY

■ Unlike many other American software houses of the day, Artworx managed to ride out the storm of the videogame crash, the radical change from 8-bit to 16-bit, dominance of the PC market and even the progression into the internet age and downloadable games. The fact it still exists today is testament to that.





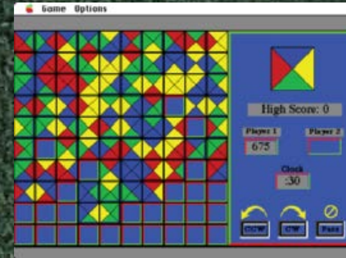
TECH WIZARDS

■ Artworx always tried to keep up with the latest technical advancements right from its early days where it bought all the latest machines and produced programs to draw state-of-the-art graphics to the 16-bit years where it was one of the first companies to utilise digital photography, scanners and even computer digitisers.

EDUCATIONAL EXCELLENCE

■ Videogames was only one half of Artworx's repertoire, it also specialised in educational programs aimed at all ages. It had titles such as *Hodge Podge* for pre-schoolers, the *Monkey* series for young children and the Linkword series for older children and adults to help them learn new languages.





» [Apple Mac] *KaleidoKubes* was an addictive puzzler that was simultaneously released for the new PC Windows OS and colour version of the Macintosh.

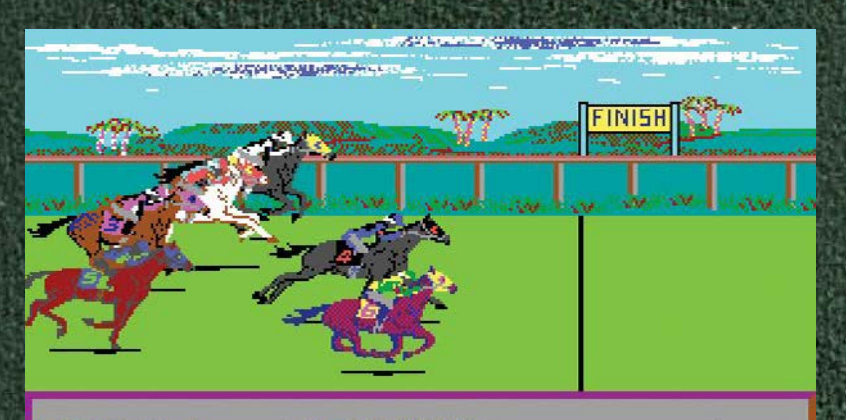
had sent us a poker game and at the time I was huge nickel and dime poker player. I enjoyed the game a lot and played it all the time so the other guys turned to me to see what I thought of it. After playing it I found that there was no reward to it. If you lost too much money you could just restart and try again, there was no motivation to keep playing. So when we [went] into the staff meeting I told the others it was boring and I specifically said we need an end game to this – like you do in strip poker. And both at the same time Art and Dennis shouted out 'THAT'S IT!' I turned around and asked them if they were actually serious, as there was no way we could sell a game like that in such a conservative market." But then there was the challenge of producing visuals for a game like this on the humble 8-bit machines of the time, so how did Doug manage that? "Well, I did the graphics pixel by pixel copying from an issue of *Playboy*. I had to copy the image to acetate and then stuck that to my TV screen and traced each line into pixels, I started with a nude image and then gradually redrew it to put clothes on. So there I was sitting in my basement placing every single pixel individually, there was no scanners back then. I had to learn how to blend colours and do anti-aliasing before I even knew what that was! It was a huge hurdle, took up a lot of time and made me glad I was just doing the graphics and not the code too. There wasn't even any proper graphics packages back then either to make things easier, you literally did have to plot each pixel individually. It was pretty much as realistic as it could be!"

***Strip Poker* became a huge success almost overnight and has been quoted as being one of the most** pirated computer games of all time. Artworx managed to keep momentum with the product by releasing a series of data disks that introduced new opponents and

> **"So we set about making a game based on the TV series Dukes Of Hazard, which was a real favourite of my son Brian. It was great to see my son playing the game"**
> Dennis Zander



» [PC] *Grailquest* was the last game in the *King Arthur* series and was interesting graphic adventure game with some adult themes.



» [PC] Horse racing games are not something you see every day, but Artworx released a pretty good one for the 16-bit machines.

even added men to the game, pretty revolutionary for the time. But the game would always be hampered by the limited 8-bit graphics of the time, something that would change in 1985 with the arrival of a new 16-bit machine. "The Atari ST changed it all," exclaims Art. "I really loved that machine, it was a marvellous computer, so easy to work with. It was the ST that finally allowed us to realise our original vision of the *Strip Poker* game. Doug then took this over to the Amiga and progressed it further. It was much easier to make the game on the 16-bit systems thanks to scanners and digitisers and the ability for these computers to display high-resolution images with hundreds of different colours. The only real limitation of the ST was that even thought it had 512 colours we could only have a palette of 16 colours, and this made it quite difficult when you are transferring digital photography over. Thanks to my background in colour imaging at Xerox I was able to come up with an palette that covered the range we needed. This all changed with VGA, we no longer had any restrictions when converting images."

Artworx was more than just one game, though, and so we asked the three guys what were their favourite memories of those years together. Dennis was the first to chip in. "I loved making *Hazard Run* and all the little details I put into it such as the sideways view for the jumps and flying chicken feathers etc… I was very proud of that game as it was received very well too, everyone I spoke to really, really liked it." And it seems that Doug feels the same way: "I really enjoyed working with Dennis on *Hazard Run*," he enthuses. "I got a big kick out of that. I didn't really work on it as such, I guess I was more of a sounding board. Dennis would write a load of code, I would play the hell out of it and then he would write more. That was a real hoot. *Intruder Alert* was also good fun, which was another game that Dennis wrote,



» [Atari ST] Dennis Zander's *Jigsaw Puzzle Mania* was computerised version of the classic pastime that allowed you to upload your own images.

there was lots to discover in that one." Dennis remembers *Intruder Alert* well: "I also have a soft spot for that very early game. I did it all in BASIC and it was based heavily on *Star Wars*. In the game you were trying to help the characters flee from the enemy and get to the Millennium Falcon. The really interesting this about this game was that I got lots of letters from people who had broken into the game and looked at the code and it had helped them to learn to program. This was a great feeling and made me very proud." Art's favourite memory is a bit more personal. "I remember that on my first ever trip to London to attend a trade show I was walking around London and saw some computer products in the window of Selfridges and saw my *Bridge* game there in our brand new packaging and was very proud."

Thanks to the advancements of technology Artworx managed to make an almost seamless step into the next generation of computing but come the Nineties, Art started to see the writing on the wall. "Although Artworx survived for a long time and we had some good successes it was clear whenever I visited shows like the CES that we were a small company. But as long as we turned a profit I was happy. Then the time came for me to retire due to health issues, we had stopped taking in new software and were just about done with updating the *Bridge* and *Strip Poker* programs. We now had an online presence where people could download our programs for a small fee or order the physical product. If I wished I could just continue adding *Strip Poker* data disks ad-infinitum but in the end I decided to leave this be and keep going until I ran out of stock. This was all well and good until I suddenly got a big order for my PC *Bridge* program and realised I had no boxes! So I had to order a batch new ones to be made. I still kept going with the download stuff a long time after this, which kept it ticking over and provided a nice little bit of income." This kept Artworx going for a little bit longer than its owner expected and in fact the company does still exist to this very day, although in a state of constant limbo. "I recently offered up the company, the name and our back catalogue for purchase," Art explains. Who knows, this may not be the end of Artworx after all. ✱

Special thanks to: Art Walsh, Dennis Zander and Doug McFarland.

Where are they now?

We discover what happened to the Artworx alumni and where they all ended up…

ART WALSH



■ Founder Art Walsh is now retired in Naples, Florida, but remains the sole owner of the Artworx Software company and still maintains a small web presence via the website. Despite not actively developing or publishing videogames anymore Art is keen to see the Artworx name live on and is open to offers from anyone who would like to continue its legacy.

DENNIS ZANDER



■ Dennis decided to leave the company in 1990 when the PC became the platform of choice, no longer feeling he could keep up with the hardware. He worked for Kodak for some time as well as setting up his own company, Z-Stuff For Trains, which he still runs to this day. This saw a return to programming as he develops programs to drive devices for the model trains market.

DOUG MCFARLAND



■ Doug sold his share in the company to Art Walsh in 1993 and continued to work full-time for Xerox as a Software Engineer until 2000. He then jumped ship to nearby rivals Kodak before forming his own company, Final Impressions, in 2002 where he specialises in fine art photography. This saw a return to his early love of creating art in his years with Artworx.



» [Atari ST] Released as part of the Artworx Program Exchange, *Hole In One* was a great golf game Atari ST.



It may not be one of the most famous arcade games, but this run-and-gunner is certainly one of the toughest around. Graeme Mason braves the bizarre magical inhabitants of Wonderland to bring you this ultimate guide…

KARNOV

Some heroes fight for a princess – a certain Italian plumber springs to mind. Some fight for the glory. But some, like Karnov, fight for a big pile of treasure and gold. The muscled, fire-breathing ex-circus strongman is the eponymous star of this game, and there's not a damsel in distress to be seen. Released in arcades by Data East in 1987, the hero's full name is Jinborov Karnovski and there are nine levels for him to cross. At the end of each level is one tattered scrap of a treasure map, held by a powerful boss creature. Finish each level, defeat the evil wizard behind it all, complete the map and treasure beyond your wildest dreams will be bestowed upon brave Karnov. Sounds simple, eh comrade?

Of course, arcade games are meant to be tough. They're meant to be instant, visceral fun, followed by an unquenchable desire to throw away a mountain of ten pence pieces. Yet most have a pattern that can be followed and a tactic that can be utilised. Careful progress and memorisation of enemy positions and attacks is often vital should you wish to proceed. Forget all that. Karnov's task is greater than his sizeable stomach. Each part of the map contains the details of a hazardous ▶



» [Arcade] Karnov's mission takes him to a variety of locations.



» [Arcade] Even the statues in these ruins spit fire at our hero.



» [Arcade] Karnov catches some rays on his not insignificant belly.



PIXEL PERFECT
Wonderland is home to many oddities…
DEADLY OYSTER
LADDER
WEEPING LADY
KARNOV
FLYING DEMON
GOLDEN STATUE
GARGOYLE
FLYING DEVIL
ROCK DEMON
THE WIZARD
SKELETON AND OSTRICH
MERMAN
GHOSTLY SOLDIER
LADDER PICKUP
KILLER PLANT
MUMMY
SWORDSMEN
K
LIONS AND TRAINER
SEA DRAGON

PLAYING TIPS

How to become a master of Karnov



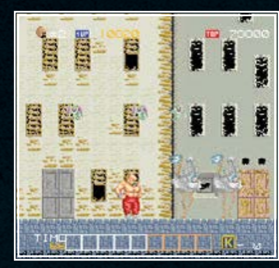
LEARN THE PATTERNS

■ Each enemy has a set path and movement style, although some, such as the swooping vultures, can still be difficult to counter. Given its slow movement, positioning prior to attacks is key. Remember that some are harder to learn than others.



DON'T HANG ABOUT

■ *Karnov* is not just a tough game; it's perversely so. Linger for too long for a breather and poisonous vegetation will descend from the sky and plant themselves around the muscular hero. A swift death is inevitable, so be careful.



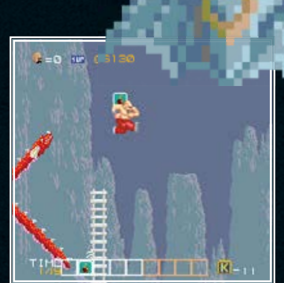
TAKE YOUR TIME

■ On the other hand, charge into any situation and Karnov will soon find himself surrounded and on his arse. Enemies are trouble enough on their own, but plough your way too far forward and the screen will fill up with walking and flying doom.



LEARN THE LAYOUT

■ As with most arcade games, use the layout to your advantage – you'll need it. Karnov can jump up onto rocks and use ladders to strike at flying creatures before they become a threat. Knowing the best places to make use of items is critical.



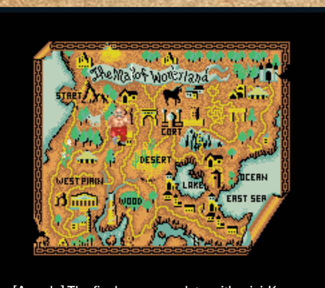
USE LADDERS

■ Most levels contain a ladder icon somewhere. Use of this icon is paramount as usually the summit contains another power-up of some description. If ever you're in doubt then use your ladder. You're bound to find something.

> "There's no doubt this is a true test for even the most skilled of gamers"

▶ area that our half-naked star must traverse in order to get one step closer to the treasure. Deadly ancient ruins, a ravaged forest, an idyllic island (where Karnov dons flippers and ventures underwater) and an ancient desert and pyramid all await him, each one has a range of opponents that offer a swift death to the big man. The range of enemies is varied and authentically fantastical considering Karnov is venturing into a place known as Wonderland. Grey and brown golems fling rocks at him; flying demons and vultures zip around the screen, one touch from any one them is deadly to Karnov. Skeletons atop ostriches charge from both sides of the screen; ghostly warriors advance upon our hero mercilessly. Later levels include golden statues, elongated serpents and exploding owls. Even underwater, Karnov has no time to relax. While the many small fish are harmless, mermen, clams (indestructible, except when they're trying to kill you) and harpoon-wielding sea warriors are lurking in the deep. Even the seaweed chucks instant-death blobs of *something* at our avaricious friend. There are also traps that force Karnov to eliminate a set of enemies within one screen with very little room to manoeuvre. And if you feel like stopping for a moment to take stock of the waves of enemies that await you, poisonous plants descend from the sky and shoot vicious barbs. There's no doubt this is a true test for even the most skilled of gamers.

Perhaps unsurprisingly, this meant *Karnov* was never the most common, or well-known of arcade games. While its hero proved popular to developers at Data East, making cameo appearances in many other games (most notably as the first boss enemy in 1988's *Bad Dudes Vs DragonNinja*), the game itself is relatively unknown today. The gameplay is influenced by similar rock-hard games such as *Ghosts 'N' Goblins*, with added power-ups and a much wider breadth (if sometimes repetitive) of enemy. The power-ups themselves are shown as small squares or a small red circle (or apple)



» [Arcade] The final map, complete with mini-Karnov making his way across to the treasure.



» [Arcade] Some end of level bosses are recycled from earlier encounters – only deadlier.

BOSS RUSH

There are six different bosses in Karnov and the game reuses them throughout. Let's take a look...

MERMAN

■ This bouncy aquatic villain is probably the easiest to despatch; with the enhanced fireball it's possible to kill him before he's even had a chance to attack. With the standard fireball, simply jump over his water balls and fire at him when you land. He'll soon be fishtory (groan).

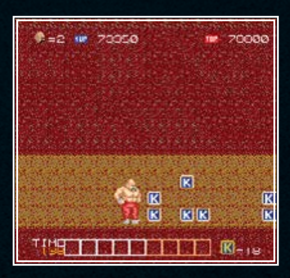
TRAINER AND LIONS

■ Easier said than done, but try and take out the lions before the trainer as otherwise they'll add a jumping claw attack to their own fireball spit. Once despatched, the trainer is easy meat.



USE POWER-UPS WISELY

■ Not all of the power-ups are particularly useful, especially given Karnov's crowded screens. For example, the boomerang is cool, taking out any enemy it touches; but its use exposes Karnov to attacks from the enemies it misses.



DON'T BOTHER WITH THE 'K' PICK-UPS

■ Each level contains a number of K icons. Collect 50 and Karnov is gains an extra life. However, with many of them awkwardly placed, it's more than likely you'll lose a life or two collecting them, so don't bother.



INSTANT DEATH

■ There aren't many instant death scenarios in *Karnov*, but when they do come, they can be very tricky to solve. Here Karnov must climb to the top of this tree to leap over the chasm. Pixel-perfect jumping is required to make it across.



JUMP AROUND

■ Jumping is Karnov's best defence against the myriad of enemies that he faces on his adventure. Much of the enemy fire can only be dodged in this way and it is a vital way of eliminating bosses, many of whom can only be shot in the head.



CHEAT

■ Now here at **Retro Gamer**, we're not advocates of cheating. However, should you be playing *Karnov* on an emulator we strongly suggest you save yourself a modicum of sanity, and at least activate the infinite fireball power-up.

in the case of Karnov's fire breath upgrade. While they are scattered around each scene, gathering many of them can be hazardous to Karnov's health, making their usefulness dulled. The mask power-up reveals further hidden power-ups, while items such as winged boots and speed/jump boosts are useful, but often make the hero harder to control and thus more likely lose a life.

The history of *Karnov* is vague. Sources suggest that while the arcade giant produced the game, it was actually developed by rival Nichibutsu, but individual credits are even harder to come by. Befitting its obscure status, *Karnov* received only a handful of home ports. Most impressive was the NES version, which was translated by Sakata SAS, a company keen to avoid credits on its games. The Famicom version expands on Karnov's backstory and tells the tale of his village, ravaged by a nasty dragon called Alakatai. The villagers pray to God and he sends an avenger – Karnov – to kill the beast and retrieve the village's treasure. Upon completion of his challenge, God promises Karnov a release from servitude. The Famicom version also offers three endings with the best score resulting in Karnov ▶



» [Arcade] This formidable power-up can destroy most enemies with one hit.


» [Arcade] The super jump is as helpful as it is dangerous.

» [Arcade] More deadly statues in the Jungle scene.

SCORPION WOMAN

■ As her body is invincible, more jumping around is required. Each hit from Karnov will cause the hybrid to rear up and attack him. Jump over her barrage of fire and attack again. Patience is the key.

TYRANNOSAURUS REX

■ In a similar vein to the Scorpion Woman, the T-Rex must be shot in the head, which is a bit of a problem considering its size. The dinosaur is pretty quick so avoid getting trapped and stomped on.

TWO-HEADED DRAGON

■ This boss makes up for its lack of speed with two devastating attacks. A direct hit from its breath is bad enough; should it hit an object, though, it explodes. Try to jump onto a ledge if you can and let loose a volley at its head.

THE WIZARD

■ While easier to avoid than some of the other bosses, the Wizard deprives Karnov of all his power-ups and also has a wide attack that encompasses the whole screen. When he appears on the lower ledges fire as much as you can before dodging the deadly stars.



Q+A JOHN MICHAEL MAY

We talk to the Mr. Micro coder, about converting Karnov to the Spectrum

How did you get involved with *Karnov*?
I'd been at Mr. Micro for about a year and had worked on a few projects as junior programmer. There were often producers from Activision around and I had done *Space Shuttle* for them, so they were happy with the studio and the work I had done. None of us had ever seen or heard of the game beforehand.

But, presumably, you got an arcade machine to work with?
Yes, we were supplied with an arcade machine for *Karnov* and *The Real Ghostbusters*. The engine we wrote for *Karnov* was used on *The Real Ghostbusters* as well.

How did the conversion process work?
We handmade all the maps again from studying the arcade game. I studied enemies for both placement and logic. I don't think looking at the two you'd believe that, but that's what we did! To be honest I can't remember any big issues aside from having to load a level at a time. The maps were not that big and the graphics fit nicely.

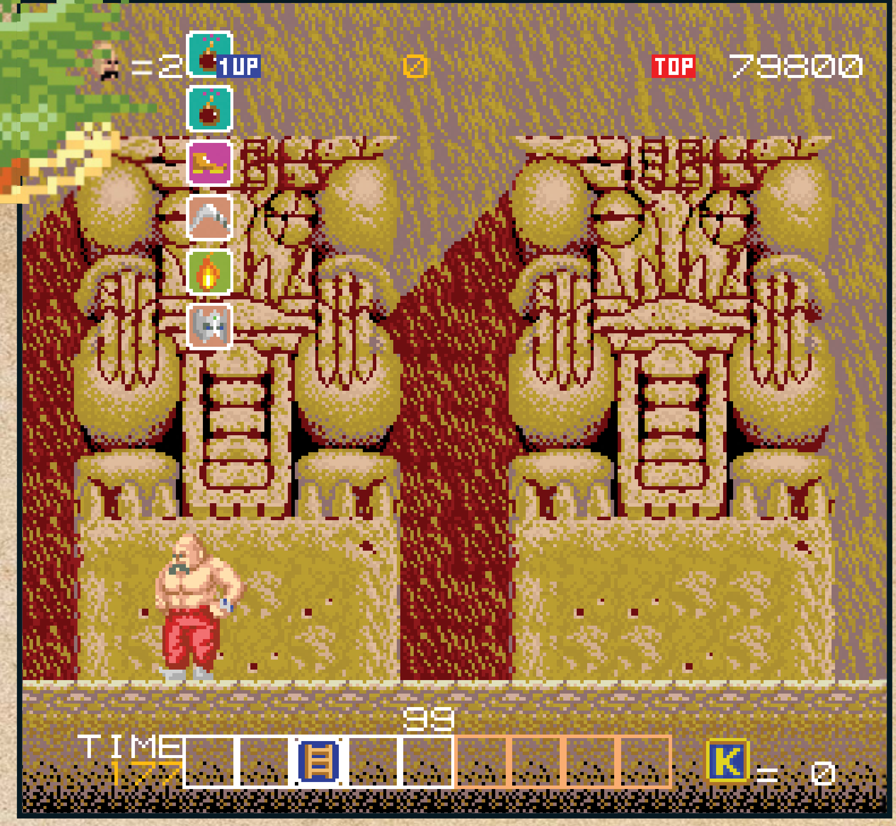
We remember the scrolling not being great on the Spectrum version.
The scrolling was the worst aspect of the conversion. I wasn't greatly involved in the main engine side of the game, but I think it was more of a frame-rate issue than scroll. I wish more had been done to fix this such as profiling and optimising the code.

You did manage to get an admirable amount of colour into the game, with only a little attribute clash.
Instead of set colours being used on sprites, as was common, we had a more dynamic system where the game worked out the background colour to use rather than forcing a colour on, hence less clash.

Overall, how pleased were you with the conversion?
I was totally happy with the work I did, delighted even. I just wish I'd been more experienced and been able to work on improving the game speed and scrolling.

Our thanks to John for his insight.





» [Arcade] The start of the final scene gives Karnov a generous amount of power-ups. Shame the wizard steals them all!

becoming God of War. Unfortunately Nintendo Of America got cold feet with the references to deities, and the intro and outro scenes were deleted for the NTSC release.

Despite the cuts, both versions are excellent, helped by a wise decision to make the game easier on the Nintendo home consoles. Karnov can now take two hits before losing a life and the enemies move slower than in the arcade version. Technically the game is inevitably inferior and Karnov himself appears to have spent a little too long in the sun, but it's easily accessible and probably the best home port. In the UK, Electric Dreams handled the ZX Spectrum, Commodore 64 and Amstrad conversions of *Karnov*. These versions varied wildly; the Z80 games were decent efforts, while the Commodore 64 received a very poor version, apparently ported from the ZX Spectrum. Karnov did not receive a direct sequel, but continued to appear in Data East's output as an unofficial mascot. The most apparent of these was *Karnov's Revenge* which was a western sequel, not to *Karnov* itself, but another game, one-on-one beat-'em-up, *Fighter's History*. That game featured Karnov as the final boss enemy while the sequel saw him debut as a playable character.

Karnov is a hard game to love, and as such it was never likely to be a hit in arcades. It's tough and the music grinds after the first two levels. Yet its imaginative graphics, range of enemies and mountainous challenge make it something of an arcade curio, and one that deserves to be more well-known. Go on – that treasure won't rescue itself. *



» [Arcade] Karnov is a good swimmer and his fire breath works underwater.

"The gameplay is clearly influenced by similar rock-hard games such as Ghosts 'N' Goblins"

CONVERSION CAPERS

Which Karnov port was your favourite?



COMMODORE 64

■ Electric Dreams really didn't do itself any favours with what appeared to be a port of the Spectrum version of *Karnov*, complete with poor sound and colour clash. Notching a miserable 13% in *Zzap!* magazine, this version is sluggish, ill thought out, and, essentially, a mess. The Commodore 64's usually excellent scrolling capabilities were also sadly absent.



ZX SPECTRUM

■ Developer Mr. Micro opted for a black border technique for the Spectrum edition of *Karnov*, which resulted in an unusually colourful display. While the scrolling was a noticable weak point, the game was playable enough, despite the presence of that infernal multi-loader, which was required for literally *every* level.



DOS

■ The PC version of *Karnov* is actually commendable, despite an even more irritating version of its music. The playing area is more squashed, but the graphics are nicely done and the scrolling is better than the other home computers. There are also CGA and Mac versions, but they're not quite as polished as the DOS effort. Highly commendable.



AMSTRAD CPC

■ Juddery scrolling aside, this is another decent stab at converting *Karnov* to the home computers. The graphics are smart (although the backdrop is much darker) and Karnov can shoot an impressive range of fireballs. Thankfully, there are no poisonous plants pestering the main man every time he pauses for a breather.



NES / FAMICOM

■ Well, someone saw sense and made the Nintendo Entertainment System conversion of *Karnov* much easier. Karnov can now take two hits, there are copiously more K icons and the enemies move much slower. The graphics are nicer too, and from a pure playability point of view, the Famicom/NES *Karnov* is significantly more fun than its arcade parent.



TIGER ELECTRONICS HANDHELD

■ Graphically it's a world away from the arcade original, and this handheld has all the restrictions you'd expect of a cheap LCD game. Karnov runs and jumps across a series of identical screens in classic *Game & Watch* style. Not fun.





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INSTANT ACCESS TO BACK ISSUES





















» [PlayStation] This opening sequence was one of the first shots Westwood filmed. The only reason it's in silhouette was because the developer was still learning to use chroma key techniques.

» [PC] *C&C*'s cutscenes certainly hold up well. Westwood's drive for better storytelling helped it make fantastic CG video.

COMMAND & CONQUER 101

■ Build a base, gather resources, recruit an army and destroy the enemy - that's *C&C* in a nutshell. The emphasis is on building the right units to counteract the threats that you might come up against, controlling them with a cursor to issue commands. Base building focuses on a tiered system to unlock more powerful units.

"We were just too aspirational to take Dune II and just iterate on it, we wanted to be much bigger and much bolder"
Louis Castle

COMMAND & CONQUER

Westwood Studios was the birthplace of the modern RTS, but it wasn't until Command & Conquer that it popularised the genre. As the seminal game turns 20, Adam Barnes discovers how the franchise was born…

These days it's impossible to really think of Westwood Studios as anything other than 'that RTS developer'. While its former days were certainly spent expanding on the franchise it became known for, there were a number of years, games and genres the PC developer tackled long before it found its niche. There's no ignoring the significance *Command & Conquer* had, however, if not for the company itself then for the entire games industry as a whole. The game essentially created a genre and went on to defend its reign against a multitude of competitors from the likes of *Warcraft* and *Total Annihilation*, to *Age Of Empires and Stronghold*. But the story of *Command & Conquer* began many years earlier, with Westwood Studios cutting its teeth on work with SSI.

"*Command & Conquer* started with us working on a game that was going to be a swords and sorcery game," says Louis Castle, one of the co-founders of Westwood Studios. "I think it was even called *Swords And Sorcery*, and it was going to be a real-time strategy game." Louis tells us of its origins with a notable indifference, but then of course these days the genre term is a lot more familiar; back then the acronym 'real-time strategy' hadn't even been coined, let alone entered the mainstream consciousness. "We had done a few strategy games for SSI," states Louis, "and we had done this *Eye Of The Beholder* series which was a role-playing game series that was real-time as well. So we had taken these very complicated rules of a *Dungeons & Dragons* game and distilled them down into a real-time role-playing game." Louis adds that Westwood was "all about real-time at the time" and so it would aim to combine its past experience, allowing for the work on its own IP – the fantasy-themed RTS named *Swords And Sorcery* – to begin in earnestness.



» [PC] Kane's appearance in the Brotherhood of Nod missions was expertly handled, but it was his charisma and acting that turned actor Joe Kucan into the future mainstay of *Command & Conquer*.

The early start on its prototype would be deflected, however, as the company came to work with Virgin on *The Legends Of Kyrandia*. With that concept already in place the small team at Westwood Studios would go on to arrange another deal with Virgin to work on a licensed game for the movie *Dune*, pitching its original *Swords And Sorcery* idea as potential gameplay for this new title. Westwood utilised the prototyped ideas of its fantasy RTS to create in what would be the first example of the genre as we now know it, a well-loved game called *Dune II* that was published by Virgin in 1992. For all the accolades and sales it earned, however, *Dune II* was limited in its success; it was a strategy game, after all, and based on a cult movie. Despite the game's novelty there would be no way of really leveraging its appeal for what – at the time – was a declining interest in strategy games.

It was then, after the release of this movie-based game, that Westwood would go on to really expand on those initial early ideas. "As soon as we finished *Dune II* we started working on the original idea again and we went back to [the] swords and sorcery setting," says Louis. "We had started the concept before *Dune* but then we were steeped in fantasy, and it was really the franchise of *Dune* that pushed us into doing the sort of military sci-fi. So we went right back to fantasy again and built out a prototype and a full storyline. It was called *Swords And Sorcery* and it had goblins as the dark forces on one side and the men on the other side – which might be starting to sound very familiar but from another company." Louis' tongue-in-cheek reference, of course, is to Blizzard's *Warcraft* series, the first of which – *Orcs & Humans* – would release almost a full year before *Command & Conquer* in November 1994. With *Dune II*'s RTS innovations already setting developers alight with ideas, it was inevitable that there would be those looking to quickly capitalise on it. Louis recalls the team's disappointment with the announcement of *Warcraft*: "We were like, 'Oh man! Somebody just took *Dune II* and reskinned it as a fantasy game! We were going to do that!' And in some ways I think we were just too aspirational to take the same game and just iterate on it at that time, we wanted to be much bigger and much bolder." There was more trouble afoot, though; this wasn't just a case of a developer looking to profit from the success of another. "It's not that it was just a direct lift of an existing game that was reskinned," says Louis, "but also there was some shady stuff going on with an employee that had left our company and gone to Blizzard and I think that having known the Blizzard guys since then I think that – though it was certainly not their intention – at some point there was more than just a little bit of copying going on. So we felt pretty awful about that."



» [PC] The missions didn't just ask you to destroy every enemy unit, some had to kill certain units, capture particular buildings or destroy specific structures.

> **"We got a call from the US military and they were like 'Who are you talking to?' and we said, 'We're just making shit up'"**
> Louis Castle

Despite the disappointment, the announcement of *Warcraft* was still something of a stroke of luck; the team at Westwood had already decided to shift focus with *Swords And Sorcery*, instead changing the work-in-progress game into a military-inspired sci-fi RTS. "We were talking about it conceptually about what was making *Dune II* and some of the other products that we had so successful," recalls Louis, "and we said, 'You know fantasy's a strong genre,' but it also wasn't exactly on the uptick at the time. We felt that if we were going to make something that was massive then it had to be something that anybody and everybody could relate to." This led to the military setting we now know, with producer and fellow Westwood co-founder Brett Sperry, writer Eydie Laramore and programmer Joe Bostic collating their ideas – deciding that the future of warfare would look vastly different than what was expected at the time. "This was pre-9/11," says Louis, "and there was tension in the world about what wars would look like and what was happening." The team decided that the war would be with "a terrorist organisation that doesn't have any state or boundaries and probably led by some maniacal figure who was bent on destroying the world." Thus Brotherhood Of Nod was born, and the Middle East would be the tension zone.



This change in design required a lot of research, however. The mechanical prototype was already there, but to create a compelling story would require so much more information. "I think that's part of why *C&C* had its charm, really, it was not meant to be a fantasy exactly, it was meant to be sci-fi with a heavy emphasis on the science, you know." Louis adds that, "All the units, all the buildings, everything that we went into were inspired by things that we were reading about, *Soldier Of Fortune* or magazines that were talking about it – there was no internet to speak of back then, so you couldn't really research things online like that. You had to go through magazines and archives and


» [PC] The beauty of *C&C* was that everyone had their preferred style: did you focus on infantry or turrets first?


» [PC] As devastating as the flamethrower units of Nod are, they are such a chore to use around your own infantry.

C&C WEAPON FACTORY

The many sequels and expansions of Command & Conquer. Which have you played?

COMMAND & CONQUER
PLAYFORMS: Various
YEAR: 1995

COMMAND & CONQUER: COVERT OPERATIONS
PLAYFORMS: Various **YEAR:** 1996

COMMAND & CONQUER: RED ALERT
PLAYFORMS: PC, PlayStation
YEAR: 1996

COMMAND & CONQUER: TIBERIAN SUN
PLAYFORMS: PC
YEAR: 1999

COMMAND & CONQUER: RED ALERT 2
PLAYFORMS: PC
YEAR: 2000

COMMAND & CONQUER: YURI'S REVENGE
PLAYFORMS: PC
YEAR: 2001

COMMAND & CONQUER: RENEGADE
PLAYFORMS: PC
YEAR: 2002

COMMAND & CONQUER: GENERALS
PLAYFORMS: PC
YEAR: 2003







such. So we were trying to figure out what the military was up to and what was going to be the next thing. And so that's what, I think, made it fun."

As the team learnt more about new military tech, a clearer vision for the game began to form. "It was mostly magazines and periodicals," says Louis of the team's research, "and from a technology point of view we looked at the white papers. We were in the libraries and subscribing to all these publications just so that we would get a sense of what the people who were really into military kit were thinking was going to be coming. So we assumed that anything that was talked about as possibly coming was already here, and that was basically what inspired the units – so the Orca was the VTOL aircraft that was very sketchily talked about and was maybe plausible and Aaron just ran with it. The whole idea of the Mobile Command Centre, that was actually novel – I don't mean novel in games, but out in the world." It was important for Westwood to create a military universe that was believable, so grounded in

INNOVATION TIME How C&C changed a genre

CONTEXT-SENSITIVE CLICKS

1 The biggest improvement *C&C* had over *Dune II* was its context-specific mouse control, which meant you wouldn't need to click an order button in the menu to issue commands to a unit. It was dependant on elements like cursor target and unit selected.

DIFFERENT PLAYABLE SIDES

2 It was novel for there to be distinct sides to play as, especially with units that differed from one another. GDI's units were often slower and stronger, while Nod favoured speedy skirmishes with cheaper – but weaker – units.

GUERRILLA MISSIONS

3 Despite heavily employing the idea of constructing a base and building an unstoppable force, *Command & Conquer* also introduced guerrilla missions. These levels gave you a specific set of units to use to survive the level, often in a bid to teach you a new unit or means of attack.



CENTREING VIEWPOINTS

4 Though *Warcraft* was heavy on the keyboard shortcuts these were for spells and construction. *C&C* smartly enabled buttons to shift your view to your base, your next unit or the currently selected unit as well as custom map bookmarks. These days this is integral to quick and skillful RTS players, with the ability to keybind any structure or unit with a shortcut.

SUPER-POWERFUL UNITS

5 The commando unit was purposely powerful, and often only given in single unit quantities. It made them far more valuable than the rest of your forces, and was a precursor to hero characters and unique stage-specific units that we'd later see in a number of RTS games.

KILL COMMAND

6 In addition to the context-driven clicks, *Command & Conquer* also added the ability to hold the Ctrl key to force a unit to attack. In this way you could create kill zones with artillery, destroy walls and fences and even attack your own units.

GROUP SHORTCUTS

7 Issuing group shortcuts is a key aspect of RTS games these days, but *C&C* introduced the ability to save groups of units so that they could be quickly accessed and ordered about at any time. This was necessary to micromanage the movement and attacks of certain units to better counter (or defend) against your enemy.

TOGGLEABLE SIDEBAR

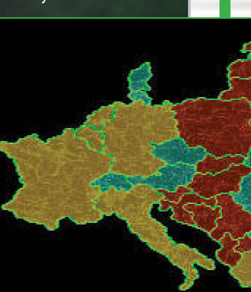
8 For the longest time RPGs and strategy games had their menus permanently up on the screen, available to select from at a moment's notice. Westwood streamlined the build menu but – better still – made it toggleable, giving you additional screen space to focus on your assault.

INSTALLATION SCREEN

9 There was a time – when Windows became dominant over DOS – where installation screens were made to be a little more jazzy and in keeping with the game being installed; *Command & Conquer* did this first, theming its installation screen around a military computer and even having it voiced by the in-game AI assistant 'E.V.A.' – the one who repeats "unit lost" over and over again.

SELECTED UNIT HEALTH

10 Dragging to select units featured in *Warcraft*, but it required a button press. *C&C* used a permanent drag-to-select option, and, since controlling large groups was so important, the ability to see all units' health was included by Westwood.



» [PC] The pre-mission map was a neat little touch, adding to the sense of your chosen faction's progress against the opposition.



IN THE KNOW

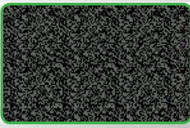
» **PUBLISHER:** Electronic Arts
» **DEVELOPER:** Westwood Studios
» **RELEASED:** 1995
» **PLATFORM:** DOS
» **PLATFORM:** Real-time strategy



» [PC] The opening mission for GDI is thrilling – even now – with clever scripting on Westwood's part to make it feel like the Normandy landing.

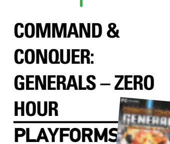


» [PC] Of the early RTS games, *C&C* was best suited to micromanagement gameplay – or directing specific units or groups of units to better counter enemy forces.



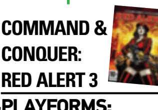
» [PC] ------------------------

COMMAND & CONQUER: GENERALS – ZERO HOUR
PLAYFORMS:
YEAR: 2003



COMMAND & CONQUER 3: TIBERIUM WARS
PLAYFORMS: PC, Xbox 360, Mac OS
YEAR: 2007

COMMAND & CONQUER 3: KANE'S WRATH
PLAYFORMS: PC, Xbox 360
YEAR: 2008



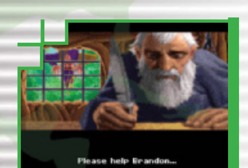
COMMAND & CONQUER: RED ALERT 3
PLAYFORMS: Various **YEAR:** 2008

COMMAND & CONQUER: RED ALERT 3 – UPRISING
PLAYFORMS: Various **YEAR:** 2009

COMMAND & CONQUER 4: TIBERIAN TWILIGHT
PLAYFORMS: PC
YEAR: 2010

COMMAND & CONQUER: TIBERIUM ALLIANCES
PLAYFORMS: Web browser
YEAR: 2012





DEVELOPER HIGHLIGHTS

EYE OF THE BEHOLDER
SYSTEM: DOS
YEAR: 1991

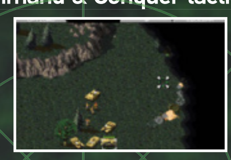
LEGEND OF KYRANDIA (PICTURED)
SYSTEM: DOS
YEAR: 1992

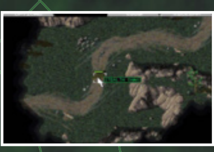
THE LION KING
SYSTEM: Mega Drive
YEAR: 1994



TAKE COMMAND Essential Command & Conquer tactics









TANK RUSH

■ It has since become synonymous with RTS games yet while the idea of the tank rush wasn't core to the gameplay – you'd need a mixture of tank types, for example – the strategy hasn't really changed to this day: build *a lot* of armoured vehicles, then roll them all into an enemy base.

GO COMMANDO

■ These units are the most powerful in the game by far, and though they can't endure excessive amounts of attacks – or, indeed, Nod's infamous flamethrower units – a single commando could still wreak havoc among an enemy base before he was finally put down. The unit would return in future instalments.

FROM AFAR

■ Using some long-range artillery is a great tactic since it'll let you ruin certain structures or units before the enemy even knows what's hit them. These units will obviously need to be protected, however, since it won't take much to find your heavy firepower and decimate it.

SNEAK IN

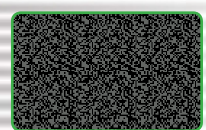
■ A sort of spin on the tank rush, the Brotherhood Of Nod has the Stealth Tank unit that could sneak into a base undetected. They are weaker than GDI's equivalents, but the Brotherhood's units give a great recon advantage that means you can more easily pick holes in their defenses and exploit them.

KITING

■ These days it'd be tricky to successfully kite an enemy's force into an ambush or turret traps you've set up, but it's still a viable strategy in *C&C* – especially against the AI. Get their attention and in many cases – when the AI feels it can survive – it'll simply follow you to your reinforcements and ultimately its death.



» [PC] It was possible to come up with your own strategies when tackling the tougher missions, which felt more rewarding when they succeeded.



» [PC] ---



» [PC] Missions were smartly designed to introduce new units or structures, advertising and utilising their abilities in certain ways to teach you how to play.

reality that it felt like something a real military force might actually use. "In fact we even got a call from the US military," laughs Louis. "They were like, 'Who are you talking to?' and we said, 'We're just making shit up.' We said they were more than welcome to come and visit the studios, and they sent a person out to come and look at everything and, for a brief period of time, we were doing concept work for them. We did a few drawings for new weapon systems that they were thinking of using – but it was just too much aggravation for the money that they would pay. It was pretty funny: we imagined what the future would be, we visualised it and the US military came to us and said, 'Hey can you help us with some presentations?'"

As integral to the experience as the story was, it was important to get that gameplay just right, after all the idea of an RTS was still very new and Westwood knew there were improvements that needed to be made. The developer looked to *Dune II* for inspiration of what needed to be changed, and what should remain the same. "We wanted a catalyst for this World War that we wanted to create, and so that's how tiberium was born; you know, it's a space-born element that came to Earth and changed everything. So that was similar to the spice [in *Dune*]." Everything else was built from scratch to ensure – as Louis puts it – that *C&C* would be a "great strategy game". Elements like the new units and menus, the cutscenes and even the context-sensitive cursor control all improved on the concepts set up by *Dune II*. "We got the context-sensitive mouse working," says Louis, adding that it was inspired through Westwood's own game *Kyrandia*. "There we wanted to make a point-and-click adventure game and context-sensitive just made it much easier to play."



But those in-game cutscenes really helped make the game standout. While other developers were beginning to play around with storyline elements through introductory scenes, Westwood really pushed the boat out by utilising both CG and live-action videos to bookend each of the game's missions. "We had Erin Powell who really wanted to be a moviemaker – and he ended up going on to make movies – and he was really into 3DS Max and then we had a couple of guys like Rick Parks and some others who were really into Lightwave and so there was a bit of rivalry between the two. They would go back and forth trying to outdo each other making these amazing 3D sequences."

While much of what would be created would be far too intensive for the hardware of the time to run it, Louis claims that it could be repurposed for advertising. This tug-o-war of one-upmanship led to further and further advances until, eventually, it was decided to record live-action footage with real people. And many of those people were Westwood Studio employees: "We had Erin running in front of a white sheet and used chroma keying to create the scene with soldiers running along the deck of a ship at sunset. The guy who was doing exercises at the beginning of *C&C* was another one of our artists, the ones who are on the skateboards and the streets – well, we literally went out onto the freeway outside of Las Vegas and filmed a skateboarding scene for an energy drink without getting any permits or anything – and it was like, 'This is totally ghetto.' We had a great time."

It wasn't until Westwood brought in a man named Joe Kucan that the quality of these scenes really took off, however. "Joe Kucan actually came in acting and directing all of our film sequences," says Louis, "he did a fantastic job. A lot of what made *C&C* what it is falls squarely on Joe's shoulders as it were, he wasn't just our talent director he was also in charge of casting and of course he played Kane. So we got super,



» [PlayStation] The build queue was adapted on consoles to allow scrolling through the list of items and was perhaps the only way it improved over the DOS equivalent.





» [N64] The N64 port used 3D models, though the missions were the same. Here's the GDI starting mission.



» [PC] The styles of GDI and Nod affected everything, from the design of structures, the types of weapons available.

super lucky with Joe." With proper actors coming in to play the different main characters, *C&C* was able to really create a cinematic feeling to the game, making the divide between GDI and the Brotherhood Of Nod feel all the more tangible to its players. "We wanted to make sure that the choice between GDI and Nod wasn't just a choice of A or B or a racial choice – we wanted it to be philosophical. So are you about socialism? Nod was about the uprising of individuals, there's too much concentrated wealth, 'The big countries can't push us around', 'Everybody has the right to self-governance' – there's some important things inside of Nod that I think are important concepts. But on the GDI side it's like, 'Oh, well, we're the good guys', but they're pretty awful too. You're going to use your military might to enforce your will onto other countries, what right do you have to do that? It's about what makes it the right of the West to go into these Middle Eastern countries and take their resources."

> "We literally went out onto the freeway outside of Las Vegas and filmed a skateboarding scene for an energy drink without getting any permits or anything"
> Louis Castle

The two different sides gave Westwood a chance to integrate a little colour to the units and structures, with GDI donning a more clinical, militaristic style while Nod felt considerably more ragtag. There were differences in unit playstyles, too, and while balance was a concern Westwood still felt the need to offer up those distinct flavours. Where GDI's strength was in its defenses – with stronger armour across the board – Nod made up for it with speed and brutality, in particular the flamethrower unit. This balance was necessary if Westwood Studios was to release a game perfect for multiplayer, but sadly that's where the RTS stumbled. "The problem was we were ahead of our time," states Louis. "There weren't really defined protocols for doing internet-based play and such. The game was built back in 1993 and 1994 before Windows 95 had come out – which helped standardise the internet." Built off the codebase for IRC chat, Louis tells us of the decision and how it was chosen for expediency to release a version of the game with multiplayer available. "I think that was one of our biggest mistakes as a company, we should've built our own online platform – we paid for it again and again. I wish we had bitten the bullet and just gone off and done our own communications system, but sadly Westwood Online was built upon the framework of software that wasn't designed to do what it did."

Not that any of that really mattered, in the end. For all its flaws surrounding multiplayer *C&C* was a thoroughly compelling title, whether you played it only in single-player or multiplayer. Releasing in 1995 for DOS with the Gold version – adding multiplayer and various improvements – in 1996. The game even went on to release worldwide ports to PlayStation, Sega Saturn and N64 throughout 1996 and 1999, with *C&C* becoming a smash hit – selling well over 3 million copies. *Dune II* might have been the birthplace of modern RTS, but it was *C&C* that not only standardised it, but popularised it too. It went on to establish one of gaming's most reputed franchises across three Tiberium Wars, three Soviet invasions in the *Red Alert* series and even the series' first fully 3D RTS in *Command & Conquer: Generals* – all the while duking it out with Blizzard and its set of RTS games. While Westwood Studios and *C&C* have since fallen at the hands of Electronic Arts at least we'll always have this truly important heritage to look back on. ✱



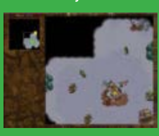
» [N64] The limitations of the N64 cartridges meant that though it could handle 3D graphics it didn't have the space to store the videos, with mission briefings using still images with audio.

MORE GAMES TO TRY

Still need a real-time strategy fix? Look no further than these

WARCRAFT II

■ It was the second game in the *Warcraft* series that really proved that the franchise was a force that needed to be reckoned with, which was itself followed by *Warcraft III* – a legendary and innovative RTS game that solidified Blizzard's success.



DUNE II

■ Though it may be a little clunky to play – since many of *C&C*'s input innovations hadn't yet been developed – it's still a fascinating look at the earliest glimpse of modern RTS. Westwood might not have known it, but this game created a genre.



TOTAL ANNIHILATION

■ There are few traditional RTS games that have ever achieved the popularity of *C&C*, Blizzard's *Warcraft* and *Starcraft* and *Age Of Empires*, but *Total Annihilation* is certainly among the elite few that have. It's 3D engine was a revelation at the time.



STRONGHOLD

■ Though the concept was familiar with *Stronghold* – build a base, gather resources, command military units – it offered such a unique style of play that it stood out among many other RTS competitors. Its castle building features were of particular note.



AGE OF EMPIRES II

■ Here was a game that took RTS gameplay and added its a twist on the base building mechanics; the idea was to progress through the epochs to unlock options. The series covered a number of titles but it was *AOE II* that many remember fondly.





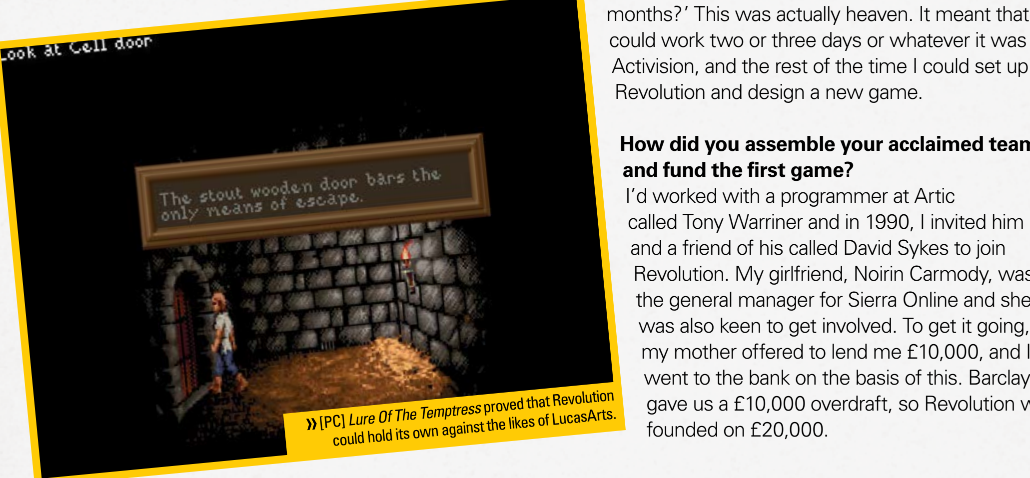
CHARLES CECIL

With Broken Sword, Beneath A Steel Sky and Lure Of The Temptress, Revolution has proved to be a legendary producer of the adventure game. David Crookes talks to Charles Cecil about the past 25 revolutionary years

Mention Revolution Software and the name Charles Cecil immediately springs to mind. For 25 years, the company and the man have developed some of gaming's most iconic point-and-click adventure games and they have proved to be so enduring that they are still played to this day, with fans clamouring for even more to be produced.

What's grabbed players is a mix of humour, storytelling and clever puzzles, which have become Revolution's trademark. Even as trends have come and gone, Revolution has endured. There may have been some tough times for the company but it has never given up.

Here Charles looks back over those 25 years. He admits that when he was writing games at university, he wasn't confident gaming would last for as long as it has. But by grabbing opportunities, he has become one of the most revered games developers of all-time. Here's to another 25…



» [PC] *Lure Of The Temptress* proved that Revolution could hold its own against the likes of LucasArts.

You began your career writing adventure games. What grabbed you about them?

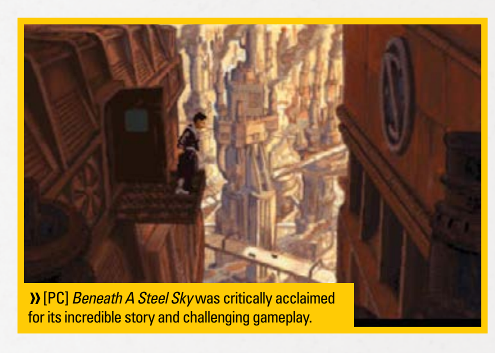
Well, there weren't many adventure games to play when I started. Scott Adams was writing games for the early Apples, and we played a few of his games. I'd also been hugely inspired by *Indiana Jones*. So when I wrote *Adventure B: Inca Curse* for Artic Computing – a company set up by a friend called Richard Turner – I was really trying to capture some of the excitement of the film. I'm not sure if the game succeeded to do that on any level whatsoever, but that was certainly the objective.

You remained with Artic for a while, eventually running the company. But then you left, set up Paragon Programming, became head of development at US Gold and worked for Activision where you were head of development. What prompted you to set up Revolution?

Rod Cousens had been chasing me to work as his head of development at Activision and around 1988 I decided to do that, but in late-1989 the US parent of Activision ran into financial difficulties. Luckily, at that time, another chap called Sean Brennan took me out for lunch and he said if I wanted to set up a company then Mirrorsoft would love to support me. When a few days later, my American boss came and said, 'We're really sorry but we're going to have to make you redundant but could you work part-time for four months?' This was actually heaven. It meant that I could work two or three days or whatever it was for Activision, and the rest of the time I could set up Revolution and design a new game.

How did you assemble your acclaimed team and fund the first game?

I'd worked with a programmer at Artic called Tony Warriner and in 1990, I invited him and a friend of his called David Sykes to join Revolution. My girlfriend, Noirin Carmody, was the general manager for Sierra Online and she was also keen to get involved. To get it going, my mother offered to lend me £10,000, and I went to the bank on the basis of this. Barclays gave us a £10,000 overdraft, so Revolution was founded on £20,000.


» [PC] *Beneath A Steel Sky* was critically acclaimed for its incredible story and challenging gameplay.

What was the money used for?

A bit of everything. We paid very low wages because we couldn't afford to pay more and everybody was on a promise. One thing we did buy was a really powerful 386 computer which Tony and Dave used to produce *Lure Of The Temptress*. There's actually a story about that. We were due to present the game to Mirrorsoft in London and so the evening before, Tony and Dave carefully wrapped the PC in a blanket, strapped it in with the seatbelt and drove from where they worked in Hull to my house in Wandsworth. The next day I went down to get something out of the car and I saw that somebody had broken in and stolen the radio. To my horror I realised that we'd forgotten to unpack the PC but, thankfully, I could see that it was still on the backseat. It was such a relief: the thief had taken a radio that was worth virtually nothing and left the PC which was worth thousands of pounds in those days. If they had stolen the PC, it would have been the end of Revolution Software because we couldn't have afforded to buy another and re-do the work. In the end, we did the presentation to Mirrorsoft and they commissioned the game.

What was your vision for *Lure Of The Temptress*?

Tony came up with the term 'virtual data', with the idea that characters could walk around the world talking to each other and that knowledge would pass. You could be anywhere and you could sit and watch, but the character and the world would go on regardless of what you were doing. That became the core idea and from that we developed the concept of giving orders. So, our hero Diermot had a sidekick



"I loved writing stories, but I was hugely privileged that people enjoyed experiencing them in an attractive way"
Charles Cecil



» [PC] The humour in all of Revolution's games is very British but Charles says it travels well.

called Ratpouch and it was also a very text-based idea: you clicked on Ratpouch and then you went to a range of verbs. You strung all of these commands together and sent this fellow off and watched him do things.

What is it that grabs you about characters, narrative and story in games, though?
When I wrote my first game for the Sinclair ZX81 in 1981 it was fun and it was for beer money. I was a student at university and you can always do with a bit more, so I loved the potential of the medium but there were very few games so I really stumbled on it as an art form. Then I started meeting people at micro fairs who were really moved by this art form, and in particular by the stories I wrote. That really surprised me because I got mediocre grades in English. I'm not the world's greatest writer, I loved writing stories, but I was hugely privileged that people enjoyed experiencing them in an attractive way. That gave us huge confidence, and in all the games I've written I feel that if I have a love for the story and the characters then I'm much more likely to be able to convey that in a way that excites the gamer.

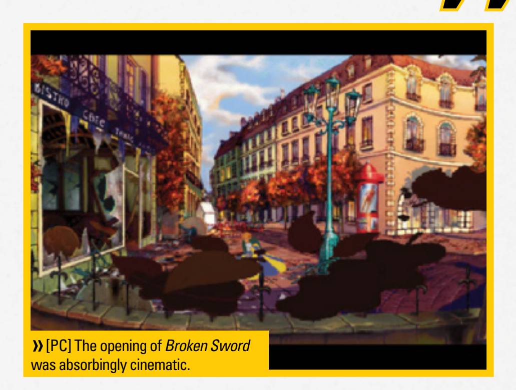
How hard was it to get an ambitious game going in the early days?
Dave and Tony initially worked from home and then they decided that they wanted to work together so they tracked down a fruit shop in Holderness Road in Hull which had a spare desk above it. It was absolutely freezing – they were so cold that they wore fingerless gloves as they typed. The people in the shop were also really mean and the area they gave them was tiny. They had to sit next to each other with the PC and a disgusting heater belching out fumes. Tony and Dave weren't quite sure whether it was better to just leave it off and freeze to death or leave it on and suffocate from terrible fumes. Once we got our first advance, though, we opened up a small office in a flat and that was lovely. It had a bedroom so I would stay for a few days and Noirin would come up as well.

SELECTED TIMELINE

GAMES

- **Lure of the Temptress** [Various] 1992
- **Beneath a Steel Sky** [Various] 1994
- **Broken Sword: The Shadow of the Templars** [Various] 1996
- **Broken Sword II: The Smoking Mirror** [Windows, PlayStation] 1997
- **In Cold Blood** [PlayStation, Windows] 2000
- **Gold and Glory: The Road to El Dorado** [Windows, PlayStation] 2000
- **Broken Sword: The Sleeping Dragon** [Various] 2003
- **Broken Sword: The Angel Of Death** [Windows] 2006
- **Broken Sword: The Shadow of the Templars – Director's Cut** [Various] 2009
- **Beneath a Steel Sky – Remastered** [iOS] 2009
- **Broken Sword 5: The Serpent's Curse** [Various] 2013

> "We're incredibly lucky that our sense of humour translates so well"
> Charles Cecil



» [PC] The opening of *Broken Sword* was absorbingly cinematic.

When did you start taking on new staff?
At that point, we took on a fellow called Steve Oades and he was responsible for the animation of our early games. Our tester at Activision, Dave Cummins, was also hired. I remember him writing a test report for a particular adventure and the way that he wrote was so much better than the writers of the adventure. He became absolutely instrumental to the text of *Beneath A Steel Sky*, *Lure Of The Temptress* and then the first *Broken Sword* game. Steve Ince, who was local to Hull, also came to support us as an artist.

One of the key people you've worked with is the brilliant comic book artist Dave Gibbons. How did that come about?
During my Activision days I had spoken to Dave who was the co-creator and artist behind *Watchmen* with Alan Moore. As we were nearing the end of *Lure Of The Temptress* and I was thinking of the next game and the idea for *Beneath The Steel Sky* came into my head. I talked to Virgin Interactive about this – Virgin had published *Lure Of The Temptress* after Mirrorsoft had collapsed – and it loved the idea. I went back to Dave and I was incredibly lucky and flattered that he loved the idea of working with us on a game.

Was there a big difference between developing the two games?
We had three or four working on *Lure Of The Temptress* and six or seven working on *Beneath A Steel Sky*. People had roles but the way it was developed was fairly similar. We were lucky because we never formally recruited. It couldn't happen today because programmers need to be formally trained.

Did those games teach you a lot about developing videogames that you perhaps didn't learn while you worked for Activision and US Gold?
Well, both Activision and US Gold had an emphasis on conversions. But it raised my ambition because I realised if I could get a talented group of people then I could absolutely compete head-to-head with these American developers and that was very much what Revolution was founded on: an ambition to not be a parochial English games company but to write games with global appeal.

But your games have a very English flavour – were you ever worried that the humour might not transcend the cultural boundaries?
Yeah, but we're lucky that our sense of humour translates so well. I didn't think then and I don't think now that we should be in any way scared.
We mustn't be parochial: we must be aware that for example, the Americans don't like toilet jokes and in the UK we do like toilet jokes but, at its core, our level of humour, whether it be *Monty Python*, *Fawlty Towers* or *Blackadder*, travels extremely well.

Obviously you went on to develop the *Broken Sword* series. What did you learn from this?
We needed a bigger team. That's why we moved from Hull to York. The appalling rail network particularly between Doncaster and Hull meant it was very difficult to recruit people and we thought it would be easier for people to travel to York. We developed a core team of the four founders and Steve Ince.



FIVE TO PLAY

The most important games of Charles Cecil's impressive career

LURE OF THE TEMPTRESS 1992

■ When Charles was thinking up names, he put *Lure Of The Temptress* bottom of his list with 'we can't call it this' in brackets. Alison Beasley, head of marketing at Mirrorsoft, insisted they could. "But there was no luring and no temptress," Charles says. "We rewrote the whole thing."



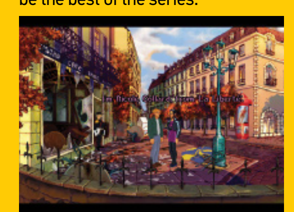


BENEATH A STEEL SKY 1994

■ Revolution's second title was critically acclaimed for its bleak vision of the future and its political, Orwellian undertones. Even so, it had lashings of humour mixed with intelligent puzzles and a compelling narrative, as well as a thrilling introduction created by comic book artist Dave Gibbons.

BROKEN SWORD: THE SHADOW OF THE TEMPLARS 1996

■ Even as the stirring voiceover began, this cinematic game was on its way to becoming an instant classic. With great puzzles, a conspiratorial narrative and cool characters in George Stobbart and Nico Collard, it is still considered to be the best of the series.





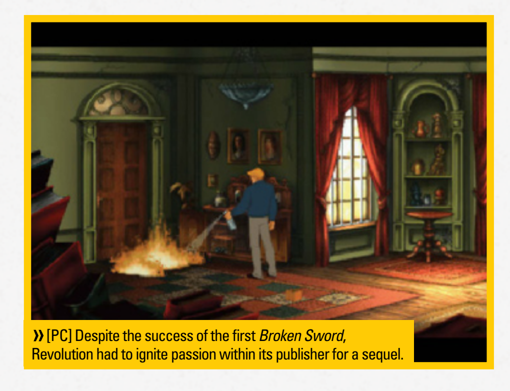
IN COLD BLOOD 2000

■ Charles admits he wasn't entirely happy about *In Cold Blood*. "I don't think it was our greatest game by a long way," he says. It was a departure for the company and there were issues with the controls but the story and puzzles were by no means a disaster and it looked smart too. "I just don't think it quite worked as a whole," he adds.

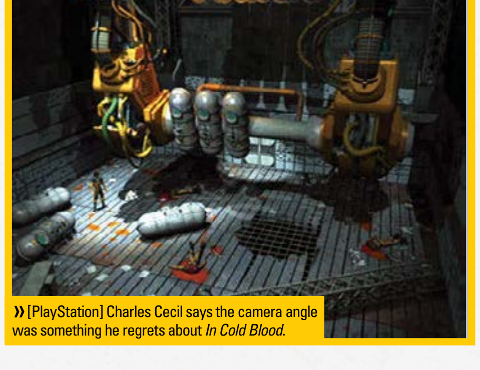
BROKEN SWORD 5: THE SERPENT'S CURSE 2013

■ The fifth and latest *Broken Sword* was funded via Kickstarter cash and it ended up being released as two episodes. The first was slow but the second picked up the pace, making it a riveting point-and-click adventure in the process. The return to 2D was also very much welcomed by fans.





» [PC] Despite the success of the first *Broken Sword*, Revolution had to ignite passion within its publisher for a sequel.



» [PlayStation] Charles Cecil says the camera angle was something he regrets about *In Cold Blood*.

In the midst of this, you also ported Sierra's *King's Quest VI*, didn't you?
Yes, that is true. That is true.

Was that an unusual move for you? Didn't you kind of set up Revolution with the intention of it being a rival to Sierra?
Revolution's ethos was the antithesis of Sierra and particularly *King's Quest* series. The *King's Quest* series as you may or may not know was King Graham of Daventry, who took himself incredibly seriously and was very much an American game depicting English medieval life in a slightly clichéd way. It was nonsense. So *Lure Of The Temptress* was absolutely the antithesis of *King's Quest*. It was tongue-in-cheek, it attempted to be witty. It was trying to be clever in a way that we felt that *King's Quest* wasn't.

But was it rather odd do you think to have made *King's Quest* following that?
Yes, it is sort of slightly ironic isn't it? Noirin, of course, had been the general manager at Sierra Online and she got to meet them, so she was almost certainly the one that drove that relationship – that's probably why I don't remember very much. It would have been a very good way of actually earning some decent profit, which we could then put into our very own original games.

Around the mid-Nineties, videogaming was changing direction and point-and-clicks were seen to be on their way out. Did that worry you at all?
Everybody was talking about the demise of point-and-click adventures so when we finished *Broken Sword*, the managing director of Virgin called me into his office and he showed me a game from Argonaut Games called *Creature Shock*. He said, 'These are the games you should be writing, not adventure games, these are the games, this is the future.' So while we had the support of Virgin throughout *Broken Sword* that was pretty much withdrawn for *Broken Sword II*. Even though the game was hugely successful both on PC and then on PlayStation we were told by Virgin that it didn't want to commission another game. It was only the support of Sean Brennan and a couple of other people that finally convinced the senior management. We didn't feel in a confident position at all.

You also had to contend with the new generation of 3D games…
Phil Harrison who we'd all known because he'd done the rounds working for everybody, phoned a number of us and said, "Look, I'm working for Sony now and there's this new console going to be produced called the PSX. Are you interested in having a look?" And, of course, we were very keen.
He did a demo and we saw the future. But people were playing visceral 3D games so when we went back to Virgin and said, 'Look, we'd like to develop for PlayStation,' they laughed at us and said, 'That's crazy, that's not going to work at all.' But I knew some of the guys at Sony and they were enormously enthusiastic. They eventually signed *Broken Sword II* up and it was hugely successful.

Was it a problem after that?
Well, we went from the late-Nineties into the Noughties through an appalling, appalling, era of the interactive movie where costs were escalating and there was, you know, for a decade say, an absolute lack of innovation in game design. That effectively was when we moved away writing adventure games.

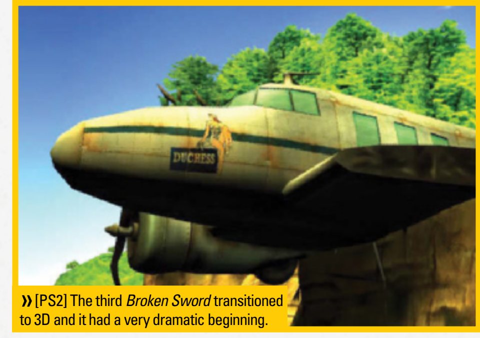
Is this why you pitched *In Cold Blood* to Sony?
Yes and I remember Dave Cummins coming to see me and saying, 'Look, you know that I really hate games like this. I just want to write adventure games.' So he left the company on the basis that he would come back again if we were to start any more adventures. But we made *In Cold Blood* and looking at it, the UI is really, really, clunky: it's difficult to play and we made some stupid mistakes. Some people loved it, some people hated it.

Was it a mistake?
Well, it was too ambitious for the first PlayStation: the camera was pulled back too far so the characters looked very pixelated. It would be great to reinvent it in some way: simply just put it out with a modern UI and maybe better textures or something. I get the sense that it's a game that actually has all ▶






» [PC] *Broken Sword's* strength lay in the numerous characters met by George Stobbart and Nico Collard.


» [PS2] The third *Broken Sword* transitioned to 3D and it had a very dramatic beginning.

this potential that was never quite realised and it would be great to be able to do something with it but that's not something that's on our immediate radar, I have to say.

You have refreshed your games from the earlier days, though: you had a second stab at the first *Beneath A Steel Sky* and the *Broken Sword* games...
Yeah. Ubisoft gave us the opportunity and then Apple in 2008 or 2009 approached us and asked us to make the game for the iPhone. It was good for us because when we had written *Broken Sword III* and *Broken Sword IV* which were published by THQ we were left in a very, very financially weak position. We lost money on both games despite them making many millions of pounds for THQ but that was the way the model worked. We had to scale right back. We closed the office and we had very few staff.

Were you pleased that technology had helped you this time around?
That was the beginning of the return of Revolution because up until that point we just didn't know how we could continue to survive. We were losing money on all our original games. I was doing quite a lot of freelance work, which I loved, so working on the *Da Vinci Code*, working for the BBC on *Doctor Who*. This was all really to make ends meet. I have no regrets at all – it was a privilege and a pleasure working on these games – but Revolution was utterly unfeasible until we had the opportunity to self-publish our games.

Would you say that was your worst ever period of Revolution, then, or would you say that around 2000 and 2003 when you made *In Cold Blood*, released *Gold And Glory: The Road to El Dorado* and had *Good Cop Bad Cop* cancelled was equally as bad?
Yeah, *Good Cop Bad Cop* was cancelled. It was a much more action-orientated game where you made moral choices and we had written a fairly comprehensive design and produced a quick prototype. There was a lot of artwork but very little work had gone in to the coding. I guess the problem was we were trying to reinvent whereas we never really reinvented the adventure game and by doing so we were moving into a much more action-orientated games because that's what publishers demanded. If we are brutally honest, we were not particularly successful in that particular transition or attempting transition.

Is there a sense sometimes that *Broken Sword* has somewhat propped up Revolution Software following troubled spells?
I think we absolutely failed to adapt, for whatever reason. That is a criticism that could be levelled at us. Once we had the opportunity to communicate directly with our audience as we did from about 2008, then our fortunes absolutely reversed. Perhaps we were being too pure and we were trying to write games that would appeal to an audience we knew existed rather than writing games that would appeal to publishers specifically or moving to somewhere in between the two.

Does it frustrate you when you look back at *In Cold Blood*, and *The Road To El Dorado*, and *Good Cop, Bad Cop*? Would you have liked to have gone off on a tangent at that stage?
That's a good question. Yes of course I'd have loved to have had huge success in action adventures, but the companies like Naughty Dog had so much money. We were always being asked to do it on a shoestring. Perhaps we were put in a virtually impossible position because the quirky nature of the


» [PC] The fourth game in the *Broken Sword* series continued the 3D nature of the third game.



YOU ASK THE QUESTIONS

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YAKMAG: Have you ever thought, 'How did I get here?' from writing adventure games for Arctic to the *Broken Sword* games?

When I wrote about *Adventure B: Inca Curse*, it started off with the player in a jungle clearing and in my mind I imagined the parrot squawking and the light coming through the trees. Years later, one of my producers started describing the game and how evocative it was, and he described it much more eloquently than I'd ever written it. It came home to me how extraordinary the interactive medium is for telling stories, particularly when you leave a certain degree to the player's imagination. I guess it's a bit like writing a book. Text adventures were closer to books whilst graphic adventures were closer to film but it felt natural to move between the two.

GIBBERISH DRIFTWOOD: Will you ever make a sequel to *Beneath A Steel Sky 2*?

I would love to write a *Beneath A Steel Sky 2*. However I would really want this to be done in partnership with Dave Gibbons. Dave and I have spoken a few times, and recently had the chance to meet and chat. At this moment, there isn't any more to say I'm afraid.

» [PC] *Broken Sword 5: The Serpent's Curse* was a big Kickstarter success for Revolution.

» [PC] If you didn't get around to playing *Broken Sword 5*, it's now available on PS4 and Xbox One.

> "I'm very proud of what we achieved with Broken Sword 5 and we're getting consistently really rave reviews"
> Charles Cecil

games we wrote with limited budgets would appeal to the audience at the time.

You mentioned your freelance work. Would you class that as being part of Revolution Software?
No, that was a separate thing. After *Broken Sword III*, because we lost money, we had to cut right back.

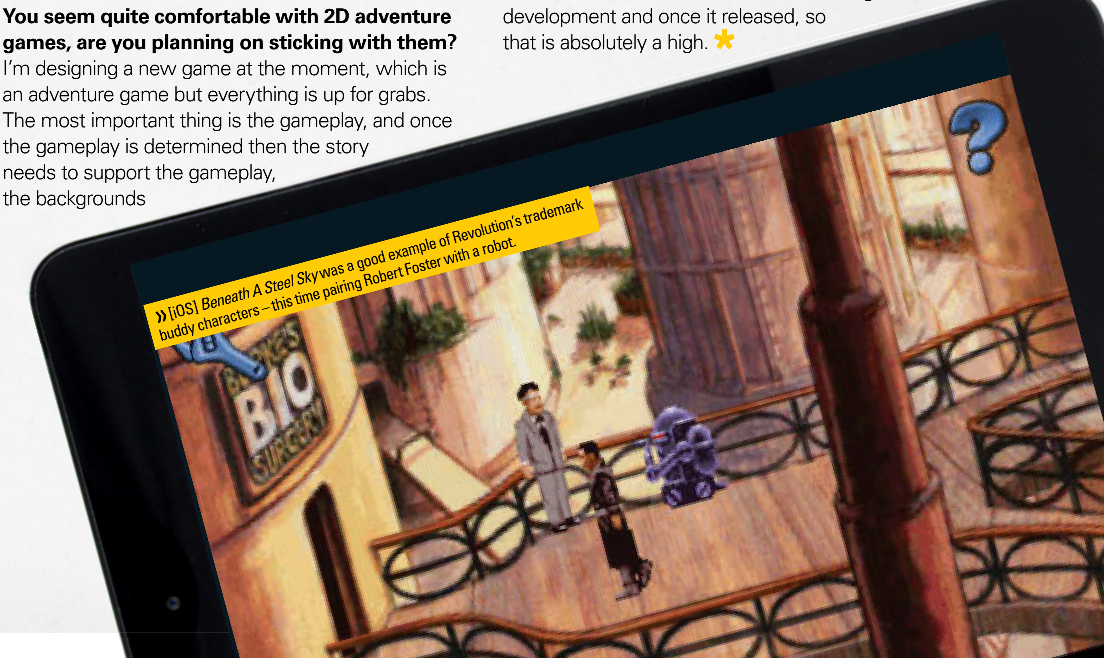
Why did crowdfunding suit you?
There was a spell when publishers were commissioning games without any sense of what the audience wanted. The CEO of Virgin US was very proud, he told me over lunch that he'd never played a videogame. The move to crowdfunding worked so quickly because people were excited to be able to connect directly with the creators, and from our perspective it was fantastic to be able to engage directly with our potential audience.

When you look at the success of *Broken Sword*, does that show you don't always need the money if you've got the right idea, the right people, and the right format?
I'm very proud of what we achieved with *Broken Sword 5* and we're getting consistently really rave reviews. You've got to bear in mind the adventure game is a niche but it's a mighty large niche. We are appealing to a really loyal, wonderful, bright audience who love our adventure games.

When you think about adventure games over the past 25 years, names like LucasArts, Sierra come in there, but so does Revolution, and you must be really proud that *Broken Sword* and *Beneath The Steel Sky*, and *Lure Of The Temptress* are seen as some of the best adventure games that have ever been written.
I'm enormously proud and I'm also really, really, proud of when we received, as we often do, communications from people who talk about *Broken Sword* and *Beneath The Steel Sky* being an incredibly important part of their childhood and their growing up, and their relationships with their partners, and their lives in general. I think back to being told that we should abandon adventure games and we should write games like *Creature Shock* instead because there was always a big division between the audience who are incredibly passionate about the games we wrote and the publishers who were seeking to commission games without any knowledge of the market because they never played games.

You seem quite comfortable with 2D adventure games, are you planning on sticking with them?
I'm designing a new game at the moment, which is an adventure game but everything is up for grabs. The most important thing is the gameplay, and once the gameplay is determined then the story needs to support the gameplay, the backgrounds and the character art, and the general style needs to support the gameplay. I just think 2D was the right thing to do for *Broken Sword 5* and going forward it's not something I'm wedded to, but I am aware it is popular to our fans, so that's something I would seek to either reproduce again or in some way emulate.

What would you say were your real highs of Revolution Software over the past 25 years?
I really enjoyed the Kickstarter process and the ability to communicate directly with 15,000 people. We had some really talented people, we had a great team and they worked very hard. And just the passion of the fans when we announced it and through development and once it released, so that is absolutely a high. *



» [iOS] *Beneath A Steel Sky* was a good example of Revolution's trademark buddy characters – this time pairing Robert Foster with a robot.


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Space Invaders

CHRIS HILL RECALLS HOME GAMING'S FIRST MILLION-SELLER

» ATARI 2600 » ATARI » 1980



I remember the smell and sounds of an arcade most distinctly when I think of *Space Invaders*. I think it was a mix of stale beer, cigarette smoke and, dare I say it, the sweat of gamers pumping ten pence pieces in the cabinet. It must have been around 1980 when I first played *Space Invaders* in the arcade and this was the year Atari brought this classic game to the 2600.

Such was the scale of the game in the late-Seventies and early-Eighties that it was ported to many different computers and consoles – and that was just the licensed versions. The 1980 Atari 2600 version was the version that set the quality high and remains one of the best ports around even to this day. This was the early years of consoles and it was a huge hit for the company at the time, becoming one of its most successful titles. The port was not entirely exact to the arcade, yet its gameplay was amongst the best of the classic home versions.

The concept was the same, with aliens coming in faster and faster and the sound effects thudding with the impending doom should you not destroy them in time. Like the arcade original, it was easy to control and pick up and play, yet it was a challenge especially in later levels. The cartridge and packaging artwork varied too so for collectors there are a few options to choose from. The cart contained 112 versions of the game including a two-player mode, which is a nice touch.

This is a game that any retro gamer should have in their collection – not just to put on the shelf and admire, but to get back to the raw gameplay of the arcade at home and challenge themselves to a difficult game. *



RETRORATED



>> It's been a bittersweet month for us. We've been impressed by Transformers: Devastation and Forgotten Ball, but it's been balanced out by the insanely average Ghost Blade and the appalling Tony Hawk's Pro Skater 5



» [Dreamcast] The enemies on the right are dangerous – the targets on the left are bomb-building fodder.

Ghost Blade

NOT AS SHARP AS WE'D HOPED

INFORMATION

» **FEATURED SYSTEM:** Dreamcast

» **ALSO AVAILABLE ON:** N/A

» **RELEASED:** OUT NOW

» **PRICE:** £29.45

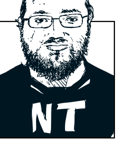
» **PUBLISHER:** HUCAST

» **DEVELOPER:** HUCAST

» **PLAYERS:** 1-2

BRIEF HISTORY

» After working with NG Dev Team on Last Hope, HuCast Games struck out alone with the horizontally-scrolling Dreamcast shooters *Dux* and *Redux: Dark Matters*. *Ghost Blade* is the team's first foray into vertically-scrolling shoot-'em-ups, and has been in the works for over two and a half years.



Déjà vu is a funny thing. We're convinced that we've sat in front of a Dreamcast shoot-'em-up thinking, "This must be the last one" a dozen times before now – and weirdly, it turns out that's true. It's a feeling we had when we first unwrapped *Ikaruga* in 2002, then a year later for *Border Down*, and again for the likes of *Trigger Heart Exelica*, *Last Hope* and *Sturmwind*. And wouldn't you know it, almost 15 years after Sega announced its intention to leave the hardware market, we're here again thanks to HuCast Games and *Ghost Blade*. So, how exactly does this latest last dance fare?

On the surface, things look quite good – both tate (vertical) and yoko (horizontal) screen orientations are supported, there are three ships to choose from, each with their own distinct firing patterns, and there's a pretty sweet piece of driving techno music accompanying the action. The high-resolution 2D visuals are attractively rendered, but it seems that these visuals come at the cost of consistent performance, as the frame-rate drops about a minute into the game. These drops are frequent enough to be noticeable, and in rare cases severe enough to disrupt play – there's a particular spot in the second stage where we had to habitually bomb, because the screen wasn't updating fast enough to reliably dodge enemy fire. Sadly, playing in tate mode makes this problem even worse.

Once you get past the technical issues, *Ghost Blade* is a shoot-'em-up that has been competently assembled. You can press A for your standard shots and X for a focused shot which combines your firepower into a single, narrow stream and slows your ship a little. The benefit of the focus shot is that it awards Tech Orbs, bonus pick-ups that award additional bombs. Fired with the Y button, bombs do the usual trick of clearing the screen, though they do little damage against bosses – and, if you pick Novice mode, they'll automatically trigger when your ship is about to be hit.

The level designs encourage a certain rhythm of play – waves of enemies which are spread out need the regular shot and clusters of cannon fodder are

PICKS OF THE MONTH

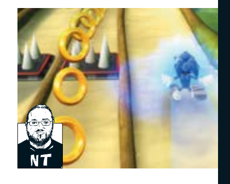




DARRAN

Transformers: Devastation

If you loved the Eighties cartoon, you're going to be extremely impressed by Platinum Games' over-the-top action epic.



NICK

Sonic Dash 2: Sonic Boom

Even if I could do without the dodgy *Sonic Boom* designs, putting Sonic in an endless runner makes a whole lot of sense.

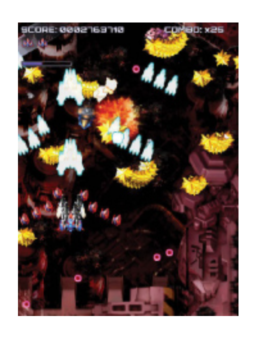
WHY NOT TRY

▼ SOMETHING OLD

MARS MATRIX (DREAMCAST)

▼ SOMETHING NEW

ESCHATOS (PC)

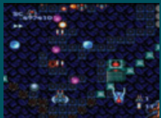


» [Dreamcast] Your own firepower all too frequently overwhelms that of the enemy forces.

GATEWAY GAMES

Are you a shoot-'em-up novice? Try these…

BLAZING LAZERS



■ Better known as *Gunhed* in Japan, this PC Engine classic is no pushover, but provides an unintimidating entry point into the genre. It doesn't hurt that it's a fondly remembered classic, ranking 7th in **Retro Gamer** readers' top 25 PC Engine games in issue 145.

THUNDER FORCE III



■ While the middle child of the Mega Drive *Thunder Force* series isn't as visually impressive as its sequel, it's still a true classic of the genre with an awesome soundtrack. Handily, it also offers a rewarding challenge without murdering the player straight out of the gates.

GAIA SEED



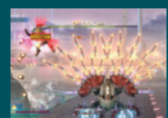
■ Techno Soleil's game is a rarity – a shoot-'em-up with a regenerating shield, which makes it very forgiving for beginners. It's an expensive Japanese import, but a digital copy can be purchased cheaply on modern platforms via PlayStation Network if you have a Japanese or American account.

ZANAC X ZANAC



■ This remake of Compile's classic Famicom shooter is well-known as an expensive Japan-only PlayStation release, but PSN availability has returned it to the market as a cheap and relatively easy way to get into one of gaming's oldest genres. Of course, you'll need an overseas account to get it…

OMEGA FIVE



■ Natsume's early Xbox 360 shoot-'em-up is widely available thanks to its download release, and not too tough for inexperienced players. It's also incredibly pretty thanks to the hardware it runs on. Sadly, a 3DS port was canned when Konami acquired publisher Hudson Soft.

clearly designed for bomb-building. All of the game's bosses have multiple targets to destroy, ranging from massive side-mounted things to a variety of small gun emplacements, and take a fair amount of fire before they go to the great scrapyard in the sky.

However, as with the presentation, the game design makes a good first impression but quickly falters. Enemies generally put up little resistance so most of the time, you're safe to use the focus shot and build up a ludicrous stock of bombs. It's also quite easy to acquire extra lives during the early stages, and your ship becomes insanely powerful before the end of the first stage. What's more, the difficulty doesn't really kick in until the third of the game's five stages.

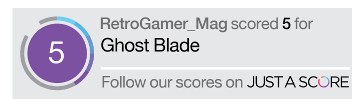
The result is that *Ghost Blade* is quite an easy game – it won't take more than a weekend for anyone with half-decent shoot-'em-up skills to clear in a single credit, and if you play it with Novice mode enabled, it's entirely possible you'll do just that on your first game. And once you've done that, there's not a lot else to do. Apart from the regular one-player and two-player modes, there is a training mode which allows you to select previously-beaten levels. But the promised caravan mode didn't make the cut and there's, weirdly, no second loop for the hardcore shoot-'em-up enthusiast. The scoring system is combo-based, but it's so easy to keep your combo high that chasing high scores won't hold your attention.

What you'll get out of *Ghost Blade* really depends on what you're looking for. It's nice to have a new Dreamcast game in 2015, and that novelty alone will ensure some level of community buy-in – after all, it doesn't have a lot of competition right now. If you've always been intrigued by shoot-'em-ups but were intimidated by the challenge, *Ghost Blade* might well prove a reasonable initiation into the genre.

However, if you're still in the market for new Dreamcast games you've probably got quite a bit of shoot-'em-up experience. If that's the case, *Ghost Blade* isn't going to satisfy you. Even if the low difficulty and lack of extras doesn't bother you, the main problem with *Ghost Blade* is that it is quite bland. The game seems to lack distinct ideas of its own, and as a result there's little to recommend it over any other shooter on the system. If you've played more than a couple of vertically-scrolling Dreamcast shoot-'em-ups, you're not going to see anything new in *Ghost Blade*. It's not unenjoyable by any means, it's just distinctly average. *

In a nutshell

***Ghost Blade* isn't awful by any means, but between performance problems, a lack of replay value and a dearth of originality, it will fail to hold the attention of all but the least demanding players.**



» [Dreamcast] Some bullets cancel when the enemy dies, but you have to memorise which ones do.



» [Dreamcast] The game's high-res visuals do look nice, though they're best displayed on a CRT.



» [Dreamcast] Destroying enemies with focus shots earns Tech Orbs, which fuel your bombs.

RETROROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

Tony Hawk's Pro Skater 5

» **System:** Xbox One, PS4 (tested), Xbox 360, PS3 » **Cost:** £49.99 » **Buy it from:** Retail and online

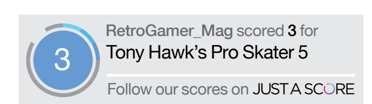
***Tony Hawk's Pro Skater 5* is easily one of the worst games we've played in recent memory.** It's a shambles of a release that has not only been clearly rushed out to market (Activision's licence expires this year) but sullies a great name in the process. A developer is going to have to have balls of steel to want to be associated with The Birdman going forward as *THPS5* is a terrible game.

It was clear from early previews that the game was facing problems, but we've been genuinely shocked at how shambolic the product actually is. We've seen the game constantly crash for no reason, load two levels up at once, refuse to load mission way points and much more. Even a day one patch didn't exactly help matters – gigantic as it was – and it remains an incredibly ropey release that Activision expects you to shell out over 40 notes for.

Bug issues aside (and they are many and numerous) *THPS5* fails on numerous other reasons, with the main one being it's now aimed clearly at beginners. There's no fall penalty for messing up a grind or manual (other than resetting your multiplier) which takes away much of the skill of the earlier games. The vaunted online mode and level editor are weak, with the former constantly filling the screen with off-putting messages and the later featuring amazingly useless tools; while many of the new missions are simply boring to play.

There's a decent number of levels to unlock and secrets to uncover, but the level design itself is dull and uninspired and don't open themselves up to high score gaming likes its earlier peers. The licensed music is weak and a low point for the series, the cel-shaded graphical style is incredibly ugly and makes it look like a poor PS2 game, while the collision detection will have you crying into your pad due to its inconsistency. Occasionally it all comes together for a few brief minutes of unbridled fun, but then the game simply crashes and you come back down to earth with a bump.

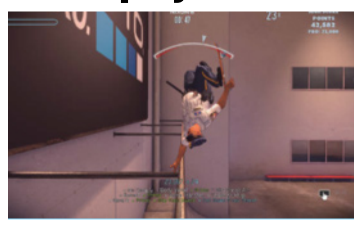
There are elements of a somewhat decent game locked somewhere in *Tony Hawk's Pro Skater 5*, but we'll be damned if we can actually find them.





» [PS4] Online is largely pointless, more so when the exploits of your opponents are plastered over the screen.

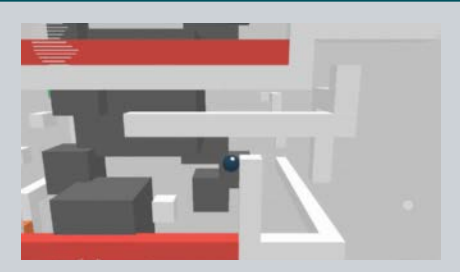
> "One of the worst games we've played in recent memory"



» [PS4] Look how cool this guy is. He can perform plants with just his fingers.



» [PS4] This pretty much sums up what people think of the level editor and the game.



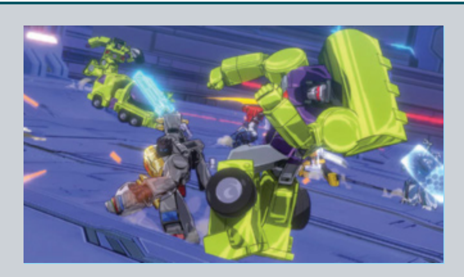
Forgotten Ball

» **System:** iOS (tested), Android
» **Buy it for:** £1.49 » **Buy it from:** App Store, Google Play

It's been out for a while now, but it's quite possible this delightful Kickstarter has passed you by like it did us. *Forgotten Ball* is an interesting brain bender that sees you guiding a ball around an abstract 3D maze, which calls to mind past classics like *Spindizzy*. Levels cleverly rotate as you move around them, typically opening up areas that you might not have initially seen, while switches must be tripped to activate handy lifts. Red blocks, which form the basis of most of the game's puzzles, must be avoided at all times, while physics must also be taken into consideration. It suffers in the control department at times, but this remains an absorbing game with lovely music.



RetroGamer_Mag scored 7 for
Forgotten Ball
Follow our scores on JUST A SCORE



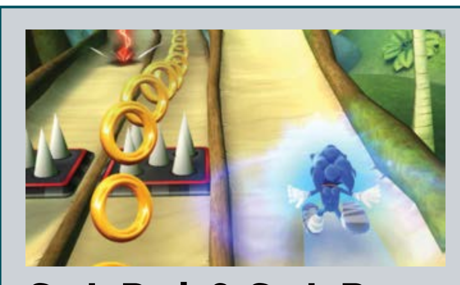
Transformers: Devastation

» **System:** Xbox One (tested) PS4, Xbox 360, PS3, PC
» **Buy it for:** £49.99 » **Buy it from:** Retail and online

Transformers: Devastation may be short (it clocks in at under six hours) but what it lacks in length it makes up for in sheer awesomeness. The five available Autobots: Optimus Prime, Bumblebee, Wheeljack, Sideswipe and Grimlock all play completely differently to each other, while the ability to combine weapons greatly adds to *Devastation*'s longevity and combat complexity. Mechanics-wise, it's essentially a lite version of *Bayonetta*, but there's still plenty of depth, particularly on the later levels. It also looks brilliant, with the stylistic visuals effortlessly capturing the cheesiness of the original Eighties TV series. An entertaining action game that boasts excellent replay value.



RetroGamer_Mag scored 8 for
Transformers: Devastation
Follow our scores on JUST A SCORE



Sonic Dash 2: Sonic Boom

» **System:** iOS (tested), Android
» **Buy it for:** Free » **Buy it from:** App Store, Google Play

Sonic Dash was a decent spin on the endless runner format, and it makes just as much sense the second time around. This time though, everyone's been wrapped in toilet paper to fit the *Sonic Boom* series. If you can get past that, it's still good – the new wrinkle is that you can bring three characters along and switch between them, allowing you to take advantage of different special powers. In-app purchases are present but not obtrusive, though you will have to play a lot to unlock characters. Like its stablemate *Sonic Runners* it is blighted by an inconsistent frame-rate, which dampens our enthusiasm somewhat.



RetroGamer_Mag scored 7 for
Sonic Dash 2: Sonic Boom
Follow our scores on JUST A SCORE

Welcome to Homebrew



>> The ZXS Retro Game Jam and similar gigs are a great idea, and something I'd like to do include news about events like these before they begin to hopefully help with 'drumming up trade' as it were. News has to arrive a couple of months beforehand for that to happen, but if anyone wants a mention for their competition, please get in touch!


» [ZX Spectrum] Come on, now: don't be a chicken.

ZX-FLAVOURED JAM

The Spectrum gets some homebrew love

We've been covering quite a few game jams recently, but the *2015 ZXS Retro Game Jam* at Itch.io stands out a little simply because it was all about creating games to run on the Spectrum rather than retro-styled titles on current hardware. The specific theme for this 48-hour event was, for some bizarre reason which doesn't entirely appear to have been explained, 'evil chicken'.

Looking at the two entries, Gazzapper's release is a simple, single screen collecting game where little Timmy wants some eggy bread and must collect the eggs himself while pursued around the screen by the titular Angry Chicky. This is made more difficult by Timmy not stopping once in motion and the pursuing chicken relentlessly heading towards our French toast loving hero with only hazardous cracked ice and the aforementioned eggs acting as barriers between the two. The other release is *H7N9* – referred to as *H5N1* on the ZXS jam website and both are strains of the bird flu virus – by Nitrofurano, described by the author as a simplified version of Atari's Adventure where a mad chicken must be guided around in search of keys and eggs – make a map because it's quite easy to get lost!

The final turnout proved to be a little disappointing with only two entries appearing, and we can't help feeling that was down to the strict time limit on this competition; we understand the intention to kickstart development that would in turn lead to larger projects, but 48 hours is very restrictive even for that. Hopefully the organiser won't be put off and we'll see future iterations gaining a more support, but in the meantime both games are available from the game jam page which is behind Kikstart.eu/zxs-retro-2015.

> "The final turnout proved too disappointing with only two entries"

Incoming

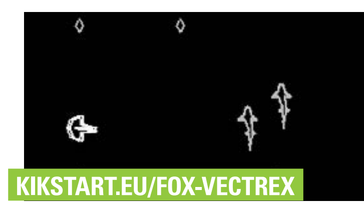
A long lost C64 game has finally appeared, which is good news if you are a Daffy Duck fan

KIKSTART.EU/DAFFY-C64



▲ It isn't new, but *Daffy Duck* on the C64 was recently recovered and made available by the GTW team.

▼ Collect all of the sea crystals while avoiding sharks and the scary-sounding *Medusa In Marine Fox* for the Vectrex.


KIKSTART.EU/FOX-VECTREX

KIKSTART.EU/KNIGHT-WEB

▲ There's a web-based remix of Gremlin's *Future Knight* online based on the Amstrad CPC version.

NEW GAMES NEEDED

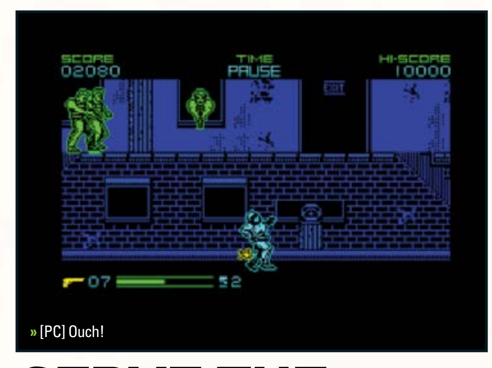
If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

EXPLOSIVE STUFF

Boom! is a fast-paced action game which is inspired by the Activision classic *Kaboom!*. The player must dash around the screen to catch a mad bomber's falling explosives in their joystick-controlled bucket before one hits the ground and detonates. Developer Atarius Maximus wrote the game to give away as a sample of 7800 basic so the source code is also available for anybody who wants to learn about creating their own Atari 7800 games. Kikstart.eu/boom-7800 heads over to the Atari Age forum thread where there's an archive to download and a YouTube video of the game running.



» [Atari 7800] Dropping the bomb.



» [PC] Ouch!

SERVE THE PUBLIC TRUST

We looked at the challenging 8-bit remake *RoboCop Classic* last issue but the developers emailed us to point out that, along with a recent upgrade to version 1.1, the game can now be played either with the Amstrad CPC theme or a new Spectrum-based one. Who knows, perhaps there'll be a version that looks and sounds like the C64 as well to complete the 8-bit set?

Kikstart.eu/park-games goes to the downloads page at Park Productions and both versions are included in the same archive. The difficulty curve is still what we'd consider to be off-puttingly steep however.

▼ It's labelled as a 'fake' but *Reddest Baron* on the C64 is an interesting proof of concept flight game.



KIKSTART.EU/REDDEST-C64

Homebrew heroes

Christian Clarke is one of the writers behind The Ultimate Guide To Amiga PD Games and we wanted to know a little more about the book and his love for all things public domain and homebrew on the Amiga

You've obviously got a love for public domain games, where did that start?
Wow, this question has made me feel old – it started about 25 years ago when I was a young teenager and the proud owner of an Amiga 500. Being short of money, the only way I could get lots of games to play was to buy them from the various PD libraries which existed at the time. The whole process had an air of mystery to it as often you made decisions on what game to buy based on short descriptions such as 'great game' or 'excellent *Asteroids* clone' written on poorly-photocopied printed catalogues. Being a teenager without a bank account I would have to go to the post office to get a postal order to send to the PD company and then wait for the disks to arrive in the post. Another way to get games was to swap disks with the libraries which they had missing from their collection. Within a couple of years I had 250 plus three-and-a-half disks of public domain games covering all the main genres.

How did The *Ultimate Guide To Amiga PD Games* come about and who was involved?
It all started when Graham Humphrey contacted me requesting to review my first Amiga PD game, a simple football management simulation for the Amiga set in the Eighties. During an exchange of emails, Graham mentioned wanting to produce an article focusing on the best Amiga games. This idea soon expanded to writing a small book and we were lucky to have both Robert Hazelby and a member of the Amiga community known only by his nickname, Lifeschool, join the project. Robert runs an Amiga blog and is very knowledgeable about current games, and Lifeschool has superb research skills and wonderful trivia knowledge about Amiga games and programmers. As the book came closer to publication we were very fortunate to have Darren Ithell agree to us using the graphic image from his *Dithell In Space* game, and two PD programming greats also agreed to be interviewed for the book, David J Cruickshank of *Alien Fish Finger* fame and Michael Welch the creative talent behind *Scorched Tanks*.



And how long did it take to compile the list and write the reviews?
Surprisingly, I think the Kindle edition was released after a year of the first review being written. It did contain quite a few typos so an updated version was released a few months later. The physical paperback version was released seven months later with some extra content.

What has the response been from the Amiga community?
Very positive, and they played a big part in influencing the content of the book by voting for their favourite games in the Top 100 Amiga PD Games of all time.

And finally, have you decided on your next project?
I have currently put my book writing on hold as I have two individual game projects which are nearing completion, a *Dizzy* clone titled *Dylan The Spaceman And The Smelly Green Aliens From Mars* and a horizontal shooter called *Kingdoms Of Steam*, both for the Amiga. I am also helping with producing some graphics for Graham Humphrey's current Amiga game.


CYBERNETIX (The First Battle) – P Andrews

» [Amiga] One of the classic Amiga PD remakes.

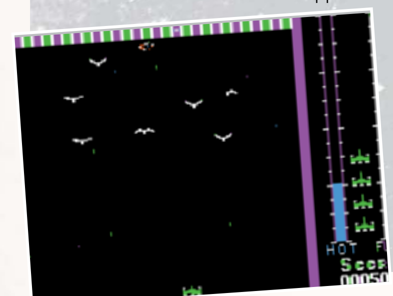
LORD OF ALCANDRIA – Edgardo Rutenberg

» [Amiga] Time for some adventuring.

Make this

Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: The weird and wonderful

1 We're used to games with reasonably realistic scenarios and locations, but that hasn't always been the case; one thing that could perhaps be resurrected is slinging unexpected, weird enemies at the player, a trend was started by early blasters like *Threshold* on the Apple II.





2 Matthew Smith's work on the Spectrum is a good example, both *Manic Miner* and *Jet Set Willy* have a normal scenario but are populated by some rather bizarre creatures.

3 One of the other people doing unusual games was Jeff Minter whose odd shoot-'em-ups on the C64 are crammed full of strange stuff; for example, the player controls a laser-spitting camel in *Revenge 2* that comes under attack from underwear, floppy disks and kitchen appliances.





4 And we really shouldn't forget *Deus Ex Machina*, which is a unique experience. In the Eighties something like this was expensive to make but with internet to collaborate over, it would be possible to develop something similar now.

FORUM64 GAME COMPETITION 2015

retro GAMER SIZZLER

» **FORMAT:** COMMODORE 64 » **DEVELOPER:** VARIOUS
» **DOWNLOAD:** KIKSTART.EU/FORUM64-2015 » **PRICE:** FREE

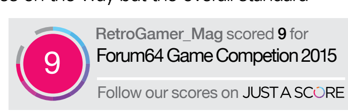
Forum64 is a German language forum for the C64 which set a game development competition in motion at the end of 2014 with the theme 'adventures' – around nine months later the finish line was passed by six entries, three of which are in German with two more in English and one able to switch between both languages.

Zeit Der Stille – which translates to *Period Of Silence* in English – is a multi-directional scrolling RPG with some nice graphics but a slightly odd viewing angle, while *Kevin In The Woods* goes down the same general exploration road but this time with flick screen movement, some nasties to be wary of and a more primitive graphical style.

Then there are the text-based games, with *Die Drei Musketiere* being a new take on the classic Alexandre Dumas tale *The Three Musketeers* which is subtitled as "an adventure about appearance and reality," and presented as a text-adventure with graphics. And the similarly text-driven but this time joystick-controlled *Das Camp* was put together using the recently released D42 game creation tool and is, apparently, based on a real location and events.

Finally, there are two Sierra-style point-and-click adventures, *Awakening* and *Caren And The Tangled Tentacles*, both of which boast some very attractive graphics and a female protagonist. Caren's adventure starts with exploring around her house where there's even an Atari 2600 to play *Pong* with if the cartridge can be found, while *Awakening*'s protagonist Lucy, a FedUp Excess worker, is just visiting an evil megacorp on a delivery when there is an accident in one of the laboratories and the elevator she's riding in plummets to the basement.

Some of these games are labelled as beta versions so there should hopefully be expanded releases on the way but the overall standard of this competition was remarkably high with the two point-and-click games in particular really shining.

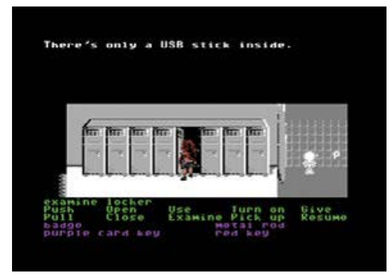




» [Commodore 64] A quick game of *Pong*.



» [Commodore 64] The signs are all there.



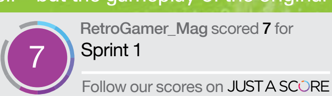
» [Commodore 64] That'll come in handy.

SPRINT 1

» **FORMAT:** ATARI 8-BIT » **DEVELOPER:** NORBERT KEHRER
» **DOWNLOAD:** KIKSTART.EU/SPRINT-1-A8 » **PRICE:** FREE

Developer Norbert Kehrer was behind porting *Asteroids* to a number of 8-bit systems by essentially taking the actual code from Atari's coin-op and grafting on routines which translate both the input and output for the new host. *Sprint 1* is a continuation of that idea, this time using the 1978 top down car racer – a single player version of the earlier release *Sprint 2* – and wrapping it up neatly in the required programming to run on the Atari 8-bit.

The controls take a bit of acclimatisation with up and down shifting gears while fire accelerates and keeping up with the computer-controlled drivers is very tricky indeed – especially with the track layout changing after each completed lap, something that occasionally throws the opponents a little as well – but the gameplay of the original has survived intact so *Sprint 1* is challenging but with that 'one more go' factor.





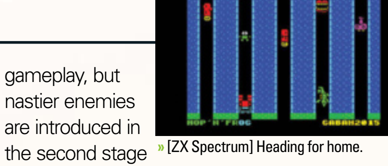
» [Atari 8-bit] I had her up to 58.

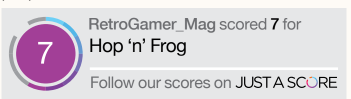
HOP 'N' FROG

» **FORMAT:** ZX SPECTRUM » **DEVELOPER:** GABRIELE AMORE
» **DOWNLOAD:** KIKSTART.EU/HOP-FROG-SPEC » **PRICE:** FREE

Hop 'N' Frog takes the ideas behind *Frogger* and turns them on their head... or more accurately, onto one side. The beleaguered frog now hops horizontally between the five vertical lanes to avoid oncoming traffic, but also gains the power to leap over at least some of the approaching hazards; the objective is still to reach safety at the top of the screen, but that's where the vehicles are all coming from too.

This unusual reworking of the traditional *Frogger* formula changes the gameplay significantly. The first level is easy enough and introduces the basics of *Hop 'N' Frog*'s gameplay, but nastier enemies are introduced in the second stage so, because there's no in-game clock to worry about, we'd advise spending a little time on the first stage to practise with the controls and gobble up some of the bonus life butterflies in preparation for the trials ahead.


» [ZX Spectrum] Heading for home.



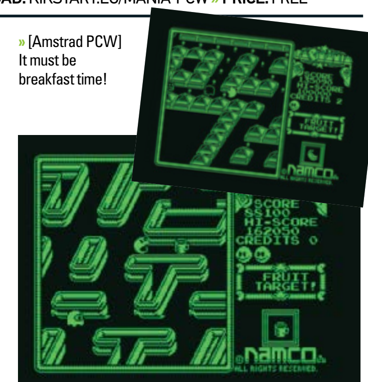
PAC-MANIA

» **FORMAT:** AMSTRAD PCW » **DEVELOPER:** HABISOFT » **DOWNLOAD:** KIKSTART.EU/MANIA-PCW » **PRICE:** FREE

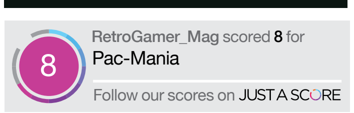
Pac-Man is back and this time he's gobbling dots and being chased by ghosts in *Pac-Mania* on the Amstrad PCW. The race to consume everything takes place in a series of isometric 3D mazes with Pac-Man and some of the pursuing ghosts having the extra ability to use the third dimension by leaping into the air.

The code and graphics have been ported from the Amstrad CPC and, because the PCW is doing some extra work behind the scenes, which slows things down somewhat, it now offers options to tweak the refresh speed before the game itself starts; this also allows players to tune the game's difficulty a little as well.

The Amstrad CPC version was quite well-received when it was originally released in 1988 and Habisoft's conversion retains all of that entertainment value that collecting pills and power-ups while racing around a haunted maze can offer.



» [Amstrad PCW] It must be breakfast time!

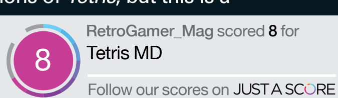


TETRIS MD

» **FORMAT:** MEGA DRIVE » **DEVELOPER:** NIGHTMARECI
» **DOWNLOAD:** KIKSTART.EU/TETRIS-MD » **PRICE:** FREE

Tetris is near the top of any list of frequently cloned games so it isn't a surprise when a new version pops up, but this one for the Mega Drive is more sparse than the feature-laden variants we're used to. That isn't a bad thing because *Tetris* doesn't need lots of bells or whistles and there are at least reasonable graphics for the well itself and some okay background images that appear as a reward for progress.

Okay, so it does lack some of the niceties like animation when a row is cleared, presentation or indeed any sound which might prove off-putting for players used to more feature-laden versions of *Tetris*, but this is a competently executed rendition of the block dropping game we all know and love.





» [Mega Drive] Beside the seaside.

MAILBAG



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STAR LETTER

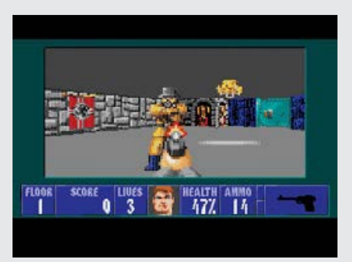
NO SPECS PLEASE

Hello **RG** chaps!

I'm a member of your forum, checking in to settle some scores. For the benefit of readers that don't visit, there's been a thread asking about the best 16-bit machine, which has seen some heated argument between Amiga owners and console gamers. Far be it from me to declare a winner, I just need to address one thing that came up in that thread: what's the deal with spec-obsessed gamers?

I see this a lot, people touting the abilities of machines in lieu of actually talking about anything they can actually play. It's true that some machines have untapped potential and could produce far better games than we've seen from them. However, that doesn't really matter to anyone except homebrew coders today – you can't play potential, after all. Unless you're actually going to produce a decent Amiga fighting game, a SNES game without crippling slowdown or a Mega Drive game without strangulated, distorted speech, what's the point of discussing these hypothetical capabilities?

» [Amiga CD32] Amiga owners rely on the *Body Blows* series for fighting games rather than *Street Fighter*.



» [Mega Drive] Sometimes homebrew developers prove a system's untapped potential.

Gents, it's time to start playing retro games in the real world and let go of this specification nonsense. None of those machines are as good as the Lynx anyway!

Anon

Well, we can't disagree with the sentiment – it doesn't matter what any system can do, it just matters what it did do. It's nice to think about the 'what if' scenarios at times, but all you'll get from that is a head full of dreams and an obsession with the Atari Jaguar.

However, we can't resist stirring the pot. Staying anonymous is no fun, we want you to show yourself. So in order to try to out you, we've given you the star letter. Come forward if you want your prize!

» Camera phones did away with our need to write down high scores – we just took snaps instead.

SCORE KEEPER

Dear **Retro Gamer**,

One of the things I fondly remember about my older machines – the Atari 2600, C64 and Amiga 500, was the small book I used to keep and record all my top scores in. I would date the score and keep the top two highest ones for every game I played. I also had a similar book which I took to the arcades for the same reason.

Does anyone else have memories of doing this, or is it me being sad?

D O'Connor

It's not just you – we used to keep scores too. In fact, some games used to provide a section in the manual for doing just that, and every so often we come across a well-used one. In fact we occasionally find handwritten password books with old games too, which is always nice to see. We finally stopped when we got camera phones, though – snapping a picture is so much easier.



» [Fujitsu FM7] Some popular series got their start on Japanese 8-bit computers, like *Thunder Force* here.

What we want to know is, did you share those scores? We always liked the high score sections in magazines like *Computer & Video Games* – we had a yardstick to measure ourselves against.

MICRO MAYHEM

Hi **Retro Gamer**,

I'm afraid I've got a bone to pick with you, and it's about 8-bit computers. In your recent issues, I've seen all sorts of exotic Japanese formats popping up – computers from Sharp, Fujitsu and NEC, amongst others. Well, now I've fallen down the rabbit hole and started trying out some of these systems for myself, and it's all your fault.

The only problem is that I'm hopelessly lost. I've no idea what games are available, or how to even run half of what's out there. Is there any chance of you printing some sort of guide to these machines in the future?

Owen Browne

We'd love to cover them in a bit more depth, but it's a matter of matching the right people to the job, as well as finding the right space to cover them. They're certainly fertile ground for Minority Reports, so that might well be the first place that you see them.

RETRO REACTIVATION

Dear **Retro Gamer,**

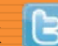
Over the last few years I've come to identify much more as a retro gamer than a 'modern' gamer. The simple appeal and nostalgia of the oldies easily outweighs the complexity – and price – of new games. Indeed, this is the first generation I haven't bought at least one new console, and I was half-convinced I'd never buy one again.

Then *Shenmue III* got announced, I pledged a bunch of money, and buying a PS4 became inevitable.

But sweetening the deal is a whole host of other 'legacy' games available or in the works: sequels or successors to some of my absolute favourites. *Street Fighter V*, *The Last Guardian* (*Ico*), *Metal Gear Solid V*, *GRIP* (*Rollcage*), *Rise Of The Tomb Raider*, *Heavy Rain* (*Fahrenheit*), *Strider*, *Mortal Kombat X* and *Earth Defence Force 2025* to name but a few.

Even without *Shenmue III* I think I would have reached the tipping point sooner or later. For me it shows two things: firstly, the current gaming scene is still hugely dependant on the legacy

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of old games, and secondly as retro gamers we overlook the current crop of consoles and games at our peril!

Tim Fitches

We love new and exciting things, but it's the sequels to old favourites that always sell us on new systems. Or, to put it another way, if you put a new *WipEout* game on a console Nick will buy it. We're looking forward to quite a few of the games you've mentioned, particularly *Street Fighter*.

But even if that weren't the case, we'd argue that modern consoles are an invaluable tool in any retro gamer's set-up. As much as we love original hardware, for most people it makes sense to buy a Wii U and download *Earthbound* from the Virtual Console than to buy an original SNES cartridge. Likewise, the PS3 offers an easy way of getting your hands on desirable imports for the PlayStation, PS2 and PC Engine. Oh, and *Rare Replay* is reason enough to buy an Xbox One on its own…

DISCUSSED THIS MONTH

YouTube Videos

This month Darran, Nick and the rest of the team have been working on videos for our new YouTube channel. In addition to interviewing developers, you'll also find the resurrection of Retro Shamer, Let's All Plays and much more. Search for Retro Gamer Magazine on youtube.com.



[PS4] A new *Street Fighter* is always a tempting reason to upgrade to the next generation…

EYE ON THE TIGER

Hi **Retro Gamer,**

Have you ever considered doing a feature on the old Tiger handheld LCD games? They might be a bit out of your remit, but they're a part of many a gamer's history. There's also some interesting stuff with the console they based off the technology, the R-Zone.

Johnny Moss

It's not something we've looked at, but if we can get someone to talk about them, it could be an interesting story. What do other readers think?

From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Your favourite SNES memories

theantmeister

I remember seeing a single screenshot of the Wampa boss fight in *Super Empire Strikes Back* and immediately wanting that game. I remember hearing the guitar intro blast out from *Spiderman* and the *X-Men*. I remember spending countless hours trying to perfect a jet pack level in *Pilotwings*. I could go on…

Bub&Bob

Multiplayer *Super Mario Kart* is probably the most post-pub gaming fun ever had.

Bluce_Ree

I liked *Stunt Race FX*. The crawling frame-rate was no joke but when a game in the early Nineties let you drive through a glass tunnel underwater, that was pretty impressive.

Retrobussola

Street Fighter II, me and my brother waited for Christmas to have it as a gift and we played for hours and hours. Our hands were completely excoriated, but we wanted to finish it with all of the characters.

RodimusPrime

Not so much the machine itself, but the PAL versions came out ages after the Japanese and US versions and were advertised in the games mags at the time. I would pore over the ads and play a game where I would have an imaginary budget and would work out which games I would buy. No console has ever had me so excited like that.

the_hawk

I remember preferring the Mega Drive.

Mayhem

Shoving PAL *Super Tennis* into a US SNES with an adapter, and realising that they had actually optimised it for PAL, and now it ran at supersonic speeds instead. I still liked the game enough to get my own copy that ran at the correct speed.

Timothy Redux

Main memory – blimey those games look expensive. Going from £1.99 Mastertronic games to £40 carts was more than my pocket money could stretch to.

LAIS

The first time I played one was when I visited my cousin. I remember being blown away by *Donkey Kong* and *Super Mario World*. We spent the whole night completing the latter, taking turns on levels. We were supposed to be asleep, but we stayed up anyway with the lights turned off and the volume turned down low.



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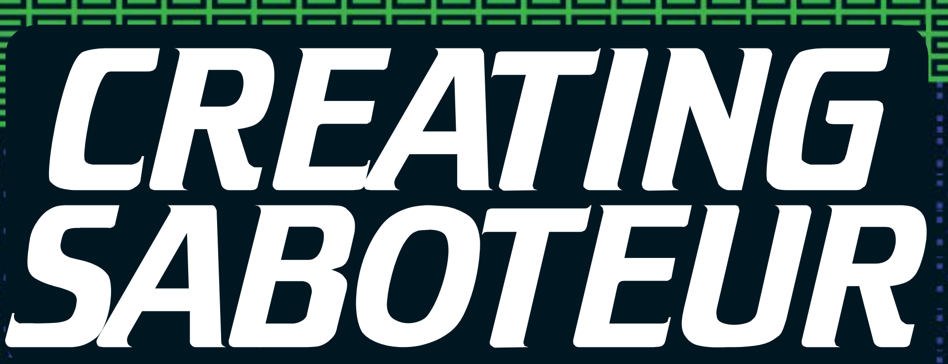


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■ We quiz Mike Posehn about his thoughtful shoot-'em-up and reveal how its many conversions fared



Mike Richardson explains how he made one of the Spectrum's best action games

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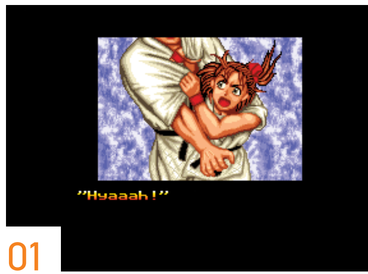
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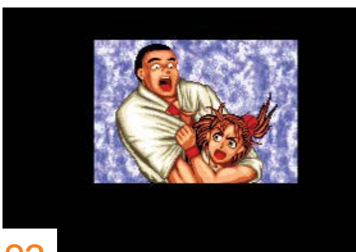
WORLD HEROES 2: RYOKO'S ENDING

» If ADK's early-Nineties Neo-Geo fighter is remembered for anything, it's probably for that Death Match mode, which added environmental hazards to the fighting stages, as well as a unique see-saw life bar and a ten-count rule. But there's something darker lurking in World Heroes 2: the tale of teenage tearaway Ryoko Izumo, a judo practitioner who may just be the strongest fighter in history...



01

» Ryoko's already proven her dominance as a fighter in the World Heroes tournament, but now she's beating up random dudes with her judo skills. You might think that she would have had enough of fighting, but apparently not.



02

» Look at this poor bloke – he's utterly terrified of this teenage terror. His pupils have shrunk to the size of mere dots, and he's screaming for his life. His ass has been very thoroughly kicked. He didn't sign up for this.



03

» Her power is terrifying. Ryoko isn't just lobbing men around with ease, she's launching them into the sky. We wouldn't be surprised if she could destroy Brock Lesnar. How has a human gained such strength? She's become unstoppable.



04

» As the pile of broken bodies mounts in the background, all Ryoko can think of is her prize money. Hey jerk, why not use some of that cash to start a support fund for all the innocent people whose lives you've wrecked? Honestly, kids these days are such mercenaries.



05

» This whole situation is truly awful. Luckily, the game agrees with us – Ryoko's violent rampage is a troubling trend. We're glad someone has some morals. Of course, moral condemnation from the game's narrator isn't going to stop her. Nothing will. All hail queen Ryoko, judo-throwing ruler of Earth.